

PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JUNE 16, 1883.

THE AMERICAN MEDICAL ASSOCIATION.

THE Thirty-Fourth Annual Meeting of the American Medical Association, held in Cleveland, Ohio, from June 5 to June 8 inclusive, was very largely attended, eleven hundred delegates and permanent members having signed the register, in addition to which some three hundred members of the Ohio State Medical Society were present at the sessions and were made members by invitation, having adjourned their own Association on this account. The Judicial Council, in conference with the Committee of Arrangements, had directed that each member or delegate, before registering his name, should sign a registry form, in which he was made to subscribe to the Constitution, By-Laws, and Code of Ethics of the Association and to acknowledge his willingness to be governed by them. Although this excited considerable comment, and a few signed under protest, yet its practical wisdom was demonstrated by the complete freedom from any wrangling on the Code question, which it had been feared was doomed to interrupt the harmony of the proceedings of this meeting. The business sessions, although so largely attended, were conducted with decorum and dignity under the direction of the venerable Dr. John L. Atlee, of Lancaster, the President of the Association, who displayed a degree of self-possession and administrative ability which excited general remark. The arrangements of the Committee of Arrangements, of which Dr. X. C. Scott was chairman, were also very satisfactory, except that the places of meeting of the different Sections were too widely separated from one another. The Association was tendered a reception at the Opera-House by the profession of Cleveland and vicinity on Tuesday evening, seven receptions at private residences of citizens were held on Wednesday evening, and ten on Thursday evening, the entertainments winding up with an excursion, on Friday afternoon, to River Bank, a beautiful spot on the border of the lake, at the summer residence of Mr. D. P. Eells, transportation being furnished by the Nickel Plate Railroad Company.

BUSINESS SESSIONS.

First Day, Tuesday, June 5.—The Association was called to order at 10.30 A.M. by the chairman of the Committee of Arrangements, and the proceedings formally opened with remarks and prayer by Bishop Gilmour. The President, John L. Atlee, M.D., of Lancaster, Pennsylvania, then took the chair. General Edward S. Meyer, on behalf of the citizens

of Cleveland, delivered an eloquent address of welcome. He contrasted the military and medical professions, as regards their respective services to humanity, in a manner not too complimentary to the former, but decidedly so to the latter. He directed attention to the quiet but powerful influence of the medical profession in the community, and hoped that it would exert all its powers to encourage among the people healthy sentiments upon subjects of hygiene, and especially on the great evils of intemperance and extravagant living, that are such prominent features of American social life, and that are fruitful sources of nervous disease and insanity.

At the close of this address, which was frequently interrupted by applause, the President invited the Vice-Presidents to occupy their places. A like invitation was extended to former presiding officers, and S. D. Gross, N. S. Davis, T. G. Richardson, J. M. Toner, and Wm. O. Baldwin, Ex-Presidents of the Association, came forward and took their seats upon the platform, amidst much applause.

The chairman of the Committee of Arrangements presented the programme for the meetings, and announced the receptions and entertainments. On the recommendation of the committee, the State Medical Society of Ohio was cordially asked to attend during the present session, its members in attendance being made members by invitation, on motion of Dr. Hayes, of Pennsylvania. Protests received with reference to certain names were announced, and referred, without reading, to the Judicial Council.

ADDRESS BY THE PRESIDENT.

Dr. John L. Atlee then delivered his annual address, which, though somewhat extended, was listened to attentively and with evident interest. After thanking the Association for the honor conferred upon him, he said, "We meet here to engage earnestly in furthering the interests and objects of the medical profession. We have come together from all parts of our broad country, charged with these great responsibilities. It is fitting to express here deep regret at the absence from our councils of delegates from the Medical Society of the State of New York. Let us hope that this absence may be only temporary, and that at the next meeting every State may be represented."

Referring to the present rage for specialties, he spoke of his own specialty, which was that of having been a graduate of over sixty-three years' standing, which fact had led him to believe that some reminiscences of his early life might not be wholly unacceptable or devoid of interest and instruction. He began his medical studies in 1815, when medical colleges were few in this country,—the Medical Department of the University of Pennsylvania, the College of Physicians and Surgeons

in New York, and the institutions of Baltimore, Harvard, New Haven, and Lexington, Kentucky,—the first-named being the leading institution, to which students came from all parts of the country. Among his personal reminiscences he communicated graphic pen-pictures of the noted medical men constituting the faculty of the University in 1817-18 and in 1819-20, and a few of his clinical teachers and classmates,—including Dr. Caspar Wistar, John Syng Dorsey, John Redmond Cox, Thomas C. James, Nathaniel Chapman, Philip Syng Physick, Joseph Parrish, George McClellan, John Rhea Barton, Isaac Hays, Samuel Henry Dickson, George B. Wood,—and incidentally mentioned some of the peculiarities of teaching and practice at this period. He referred to the establishment of Jefferson College, the institution of Wistar parties, the Philadelphia Medical Society, the green room, quiz clubs, and other interesting features of professional and student life. We have room for but a few extracts from this valuable contribution to American medical history, which has more than a passing interest and value.

The following description of Dr. George McClellan will serve as an illustration of the easy and interesting style and command of language possessed by the author:

Dr. McClellan "was a man of great natural talent, quick perception, and wonderful memory; prompt to decide and prompt to act, he made himself during his pupilage one of the best anatomists in the country, and subsequently brought more talent into surgery than any man I have ever met with. During his brief but brilliant career he performed more surgical operations than any other surgeon in Philadelphia, and he undertook to perform, and did perform successfully, some operations which were considered impracticable by other surgeons. Among these was the removal of the parotid gland. It was my good fortune to visit with him his first patient the day after the operation, and, although it was afterwards reported that it was not the parotid gland, I made a very careful examination of the tumor and of the patient, and was perfectly satisfied of its identity. This operation he performed several times afterwards,—one of them on a young Irishman, where Dr. Dease, an eminent surgeon of Dublin, had previously failed.

"A beautiful illustration of his diagnostic ability was shown to me when on a visit to Philadelphia. A female infant, about four or five months old, whose parents belonged to one of the most distinguished families in New York, was brought by her father to Philadelphia to consult the oldest leading surgeons of the city, who all pronounced the case hopeless. The child had from birth a complete paralysis of the right arm and hand. As Dr. McClellan at that time was beginning to acquire popularity as a surgeon, the father was persuaded to consult him. Dr. McClellan made

a careful examination, and found that the clavicle was pressing on the brachial plexus of nerves as it passes over the first rib, and that the paralysis was owing to this cause. All that he did was to elevate the shoulder and the clavicle by mechanical means, and the functions of the arm were entirely restored. I saw the child playing equally well with either arm on its nurse's lap.

"Dr. McClellan was of medium size, fair complexion, and with blue eyes. He was very attractive and agreeable in his manners, very vivacious, and was called 'a bundle of nerves.' He was very fond of society, and a general favorite wherever he was known. There was no jealousy in his disposition; and I may be permitted to add that he was the only surgeon in Philadelphia who congratulated me upon the success of my first operation for ovariectomy in 1843. When I revived the operation, which, after its introduction by Ephraim McDowell, had fallen into disuse, he sought me at my hotel when on a visit to the city, and gave me a most cordial embrace."

Referring to Jefferson College, he said,—

"Dr. McClellan was among the first to suggest and urge the establishment of another medical college in Philadelphia, and, with the assistance of Dr. Eberle, he determined to get a charter from the Legislature. Dr. Eberle, being a native of Lancaster County, and having practised both in the city and county for several years before his removal to Philadelphia, had many friends there, and wrote to them asking their assistance in procuring a charter from the Legislature. With the view of furthering the cause, a public dinner was given to Dr. Eberle by the leading gentlemen of Lancaster, and resolutions were then passed instructing our Representatives at Harrisburg to favor the charter. Notwithstanding the opposition that had always existed at the University to the establishment of another school, a charter was obtained authorizing the trustees of the Jefferson College at Canonsburg to grant degrees in medicine and to locate the school in Philadelphia."

Speaking of the peculiarities of student experience, he mentioned the mode of examination: "Many of the elderly gentlemen present to-day must have heard of the much-dreaded 'green box.' During the time of Drs. Rush and Barton it was reported that favoritism was shown to their respective students; and the same was said of the students of Drs. Chapman and Dorsey. To obviate this, or the appearance of it, a large green screen was placed across one corner of the room, having a door behind it, through which the candidate entered, and here underwent his examination unknown to any one but the dean of the faculty. This mode of examination was adhered to until after the death of Dr. Dorsey, when it was optional with the student to go into the green box or present himself openly before the faculty.

Some ten or twelve candidates had such a terror of the green box that they went to New York, where they obtained the degree of M.D. by undergoing an examination and paying the graduation-fee.

"Among the facilities for acquiring knowledge offered the student at that time was the privilege of attending the meetings of the Philadelphia Medical Society, which met every Saturday evening. In order to gain admission as a junior member of the Society, which was composed of honorary and junior members, it was necessary for the student to pass an examination. The committee of the year 1817-18 consisted of Drs. Franklin Bache and Jacob Randolph, the latter being Dr. Physick's son-in-law. I remember with what trepidation I went before the committee, and, to my gratification and surprise, the only question asked me was the composition of Glauber's salt. This examination over, I received a parchment certificate of junior membership, and was admitted to the discussions of the Society. After graduation I received a certificate of honorary membership. The proceedings of the Society did not differ materially from those of the present day. A paper was read, and subsequently discussed by many of the leading physicians and surgeons of that period, and was a source of great improvement to the junior members."

The following reference was made to Dr. Isaac Hays: "Among my fellow-students in 1817-18, and fellow-graduates in 1820, I should be unmindful of what is due to extraordinary merit were I not to speak of one who has done more for American medical journalism than any other physician in the country. I allude to the late Dr. Isaac Hays, the editor of the *American Medical Journal*, by whose labors, professional accomplishments, and excellent judgment the leading medical journal of this country was established. Having assisted Dr. Chapman in editing the *Philadelphia Journal of the Medical and Physical Sciences*, the motto of which was the ill-natured quotation from Sydney Smith, "Who reads an American book?" Dr. Hays established, in 1827, *The American Journal of the Medical Sciences*, which to this day, both in this country and in Europe, is admitted to be in character and ability the first. Modest and unassuming, he scorned the arts by which many seek prominence, and during a long and very busy life sustained the character of a high-toned and honorable gentleman. To him are we chiefly indebted for the preparation of the Code of Ethics of this Association, which some of our physicians, from motives we cannot appreciate, would be willing to mutilate or destroy."

Speaking of medical treatment, he said,—

"It was the time of calomel and the lancet. With regard to the one I need not speak, but of the latter I feel well assured that the almost total disuse into which it has fallen has cost

many valuable lives. From a very large experience in its use, I am satisfied—fully satisfied—that if we depended more on the early use of the lancet in the congestive and inflammatory states of many diseases, our practice would be more successful than it now is. At the present time there is too exclusive reliance upon medicines affecting the nervous and vascular systems, which act with less efficiency and are less prompt. It is, in my opinion, a very important subject, and I feel assured that ere long the lancet will be more freely used than it is now. In the congestive chills preceding inflammatory diseases and in the old stage of intermittents I have frequently broken up the paroxysm and relieved the patient by the lancet alone.

"With regard to the treatment of that day I shall say little; the text-books then studied fairly present it to you. Would that I could speak more satisfactorily of the treatment of the insane, as I remember it! They were generally confined in the basement of the almshouse, in small cells, some with manacles, others with chains; seldom had they access to fresh air, and often they had nothing but loose straw for their bedding. This unhappy and inhuman state of things continued until Pinol and Esquirol established a course of treatment more consistent with the dictates of science and humanity. In a recent visit to the State Lunatic Hospital at Harrisburg, Pa., of which I am a trustee, not one of the four hundred insane inmates was the subject of mechanical restraint."

In conclusion he made some remarks of present application upon topics interesting the profession:

"With the garrulity, and—may I not call it?—the privilege, of your oldest brother, I present you with some of the reminiscences of my college life. Before I close this address, let me briefly call your attention to some other subjects, which in my opinion are of pressing importance. Let me impress upon the mind of every member of the profession the necessity of strict and undivided attention to the duties of his high calling. Let no outside influence operate to interfere with these duties. When you undertake the care of a patient your whole duty belongs to him. The intermission of a single visit, which, on your part, may have been devoted to pleasure, may sacrifice the life of your patient.

"Above all things, ever strive to maintain the honor and dignity of the profession. Let no selfish or mercenary consideration deter you from observing the laws laid down in our noble Code of Medical Ethics. Cultivate friendly relations with your local medical brethren, more particularly the younger, and regulate your intercourse with all men in such a way as to cast no stain upon the honor of the profession, which is in your keeping.

"In my day, previous to the establishment of medical societies throughout the country,

and the organization of the American Medical Association, and the general adoption of the Code of Ethics, I saw many disastrous effects from the want of brotherly consideration and kindness. The medical men of that day were often in difficulties. Patients would be taken from one physician to another without ceremony, and so great was the jealousy existing between them that for more than twenty years after my graduation it was impossible to form a medical society in my native city and county, because there were so many aspirants for the honors. Here let me speak of some of the difficulties I had to encounter in my early professional life. Instead of being taken by the hand by the older physicians, every obstacle was thrown in my path, consultations were refused, and the treatment of my patients was unfavorably criticised.

"By the establishment of medical societies and the adoption of the Code of Ethics, a wonderful change has been effected. We now feel it our duty to sustain our younger brethren, to treat them with courtesy and kindness, to save them from their errors and encourage them in all their good work. Had the adoption of the Code of Ethics had no other result than this, it would have been an invaluable blessing to the profession. But it has accomplished more. It has put the seal of condemnation upon all 'isms,' and developed an *esprit de corps* that has enlarged the boundaries of our science and greatly increased the usefulness and social standing of the profession.

"Now, gentlemen, before concluding, let me state that, being aware that reports and papers upon every important topic connected with the different departments of medicine will be presented by the chairmen of the Sections and by individual members, I have not entered upon the discussion of any subject, either medical or surgical.

"Our meetings are for the purpose of promoting social intercourse, as well as for the advancement of medical science; but we should devote sufficient time to the discussion of the various subjects presented to us, and not allow them to be too greatly interfered with by social entertainments.

"One word more, and I have done; and I say it chiefly as a word of encouragement to the younger among you. At the close of a long life devoted unreservedly to the study and practice of medicine, I will say that, notwithstanding its uncertainties, its fatigues, its anxieties, its bitter disappointments, I am completely satisfied that in no other career can a man more fully accomplish his whole duty to God and to his fellow-men; so that when life here is ended it can be truly said of him as (be it said with all reverence) was said of Him whom we all should imitate, '*Pertransiit benefaciens*,'—'He went about doing good.' Trusting that our proceedings may be both harmonious and profitable to us

all, and thanking you again for the honor you have conferred upon me, I sincerely hope that the recollections we shall carry home with us will be both agreeable and lasting."

On motion of Dr. J. M. Keller, of Arkansas, a vote of thanks was unanimously passed to Dr. Atlee for his able and very interesting address, which was then referred to the Publication Committee.

THE COLLECTIVE INVESTIGATION OF DISEASE.

A communication from the British Medical Association was read by Dr. John S. Billings. It invited co-operation with the committee of that Association on the work of collective investigation of disease. This communication was received and referred to the Standing Committee of Atmospheric Conditions and their Relations to Prevalent Diseases, of which Dr. N. S. Davis was chairman.

AN APPEAL.

An appeal in the case of Dr. Dwight W. Day was received, and referred to the Judicial Council. On motion, all such communications were directed to take this course, without coming before the Association for its preliminary action.

CLIMATIC OBSERVATIONS AT HEALTH-RESORTS.

A communication was presented by Dr. Didama, of Syracuse, on behalf and at the request of Dr. Tyndale, of New York. It was in the form of a petition to Congress, the Secretary of War, and the Chief of the Signal Service Department, asking for the taking of climatic observations at a number of places of summer resort, by a committee of five competent medical men,—the investigation being conducted more particularly with regard to the sanitary value of such places in the treatment of pulmonary diseases. This was referred, for action, to the next morning session.

The Secretary, by direction of the Chair, read the list of members registered, after which the various delegations held meetings to select representatives to serve on the Nominating Committee.

Second Day, Wednesday, June 6.—The session being opened at 9.30 o'clock, prayer was offered by Rev. Chase S. Pomeroy, D.D. The Secretary read the following names, constituting the

NOMINATING COMMITTEE.

Drs. W. O. Baldwin, Alabama; D. A. Linthicum, Arkansas; W. F. McNutt, California; T. M. Hills, Connecticut; H. K. Steele, Colorado; W. Marshall, Delaware; D. C. Patterson, District of Columbia; Eugene Foster, Georgia; C. F. Parker, Illinois; H. J. Wood, Indiana; W. S. Robertson, Iowa; L. S. McMurry, Kentucky; W. L. Schenck, Kansas; J. W. Dupree, Louisiana; C. A. Savary,

Massachusetts; Julian J. Chisholm, Maryland; B. H. Miller, Minnesota; F. K. Owen, Michigan; E. H. Gregory, Missouri; A. J. Fuller, Maine; V. H. Coffman, Nebraska; E. Grissom, North Carolina; B. A. Watson, New Jersey; H. D. Didama, New York; W. M. Beach, Ohio; S. D. Gross, Pennsylvania; A. Ballou, Rhode Island; R. A. Kinloch, South Carolina; D. J. Roberts, Tennessee; H. C. Ghent, Texas; Alex. Harris, Virginia; J. M. Lazell, West Virginia; S. C. Johnson, Wisconsin; T. W. Miller, United States Marine Hospital; Joseph R. Smith, United States Army; A. L. Gihon, United States Navy; W. A. Tipton, New Mexico; J. B. Van Valzah, Dakota Territory.

ADOPTION OF AMENDMENT.

Dr. Foster Pratt, of Michigan, stated that he wished to call attention to a point which would affect the action of the Nominating Committee. At the last Association meeting an amendment to the Constitution was laid on the table, which was to the effect that no members but those present were eligible to office. On motion, the amendment was taken from the table, and Section 13 of the By-Laws was so amended as to read that none but members present would be eligible for the offices of president, vice-president, secretary, treasurer, or chairman or secretary of Sections.

RESOLUTIONS ON ARMY MEDICAL MUSEUM AND LIBRARY.

Dr. S. D. Gross presented a paper signed by Austin Flint, Oliver Wendell Holmes, and himself, recommending an appropriation for the National Public Museum and Medical Library, and the providing of means whereby this valuable collection shall be preserved from danger of fire. At the conclusion of this paper Dr. H. A. Johnson, of Chicago, presented the following resolutions:

"Whereas, There has been formed in Washington, under the direction of the Medical Department of the Army, a museum of unrivalled completeness and excellence, illustrating military medicine and surgery, and a medical library which is believed to be the largest and most valuable in the world; and

"Whereas, It is believed to be of the highest importance for the promotion of medical science, literature, and education in this country that these collections should be preserved and made and kept as complete as possible; and

"Whereas, It is believed that this can be best done by keeping them under the management which has already produced excellent results and by its publications has made them available for use throughout the country: therefore

"Resolved, First, That the American Medical Association respectfully urges upon Congress the importance of at once providing a

commodious fire-proof building to contain the Army Medical Museum and Library.

"Second, That the annual appropriation for this library should be sufficient to enable it to obtain all new medical publications of all countries as soon as they appear, and also to complete its collection of medical books heretofore published, and that for the purpose the sum of ten thousand dollars is considered a reasonable and proper annual appropriation, and Congress is requested to grant that sum in addition to the amount required for the Medical Museum.

"Third, That it is of the greatest importance that the index and catalogue of this library, now in course of publication, should be issued as rapidly as it can be prepared for the press, and Congress is urged to make the necessary appropriation for the purpose.

"Fourth, That a special committee of five be appointed, of which the President of the Association shall be *ex-officio* chairman, to present this matter to Congress, and to call the attention of State local medical societies, and of all who are interested in the progress of medicine, to the importance of furnishing to members of Congress and Senators full information as to the value of the museum and library, and the esteem in which they are held by the medical profession of the United States."

These resolutions were adopted.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

The report of the Board of Trustees with regard to journalizing the Transactions was presented and read by Dr. N. S. Davis.

The Board, consisting of N. S. Davis, of Chicago, E. M. Moore, of New York, J. M. Toner, of Washington, H. F. Campbell, of Georgia, J. H. Packard, of Philadelphia, L. Connor, of Michigan, P. O. Hooper, of Arkansas, A. Garcelon, of Maine, and L. S. McMurtry, of Kentucky, had held several meetings during the year, and had decided upon a general plan for conducting the Journal of the American Medical Association:

A programme for a weekly medical journal containing an average of thirty-two double-column pages of reading-matter was agreed upon,—each number to contain a department for original articles, embracing all such papers, addresses, reports, etc., as should be referred for publication by the Association, and such other original matter of value as might be contributed for that purpose; a department containing a summary of the progress in the various departments of medical science; an editorial department proper, especially devoted to the discussion of such topics as would be likely to aid in promoting the interests and efficiency of medical organizations, both national and State; a department of correspondence from the more important medical centres, domestic

and foreign; and a department of miscellaneous items of intelligence, especially in relation to the doings of all medical and scientific societies in this country, and also of notices of the duties of committees, the presentation of papers, the practical working of associations, the time and place of meetings, etc.

The Board had published forty thousand circulars containing the principal features of the plan, together with forty thousand blank pledges of support of such journal if published, and mailed them to members of the profession in all the States and Territories. It required three-fourths of these to supply fourteen States, leaving only the remaining fourth for twenty-seven States. The comparison of returns from States well supplied and those not so well supplied indicates that an increase of twenty-five per cent. would have been realized if all the States had been supplied. As it is, two thousand one hundred and fifty answers had been received; twelve were direct expressions of opposition to the proposed change, thirty-eight were equivocal, while twenty-one hundred were unqualified pledges of support, either by prompt payment of the annual dues or by subscription.

By reference to the list of members it was shown that five hundred members had not answered, while nearly the same number not members have pledged their support. This makes the aggregate number of subscribers twenty-five hundred as actual basis of income, supposing that those members who failed to reply will still continue their membership. This would indicate a revenue of \$12,500.

It is deemed best to issue thirty-five hundred copies weekly, in order to have a sufficient number of extra copies for all purposes, including sample copies. This number, on good paper, can be issued for \$8000 a year, leaving \$4500 for editorial work and current expenses of the Association. Advertisements in a journal reaching all parts of the country, as this one would, will probably bring \$5000 more, leaving a balance after paying \$6000 for editorial work. Bids have been received from two reliable printing establishments in Washington, three in Philadelphia, two in New York, and two in Chicago.

At a meeting held at the Grand Pacific Hotel, Chicago, January 17, 1883, at which Drs. Toner, Packard, McMurtry, Davis, and Connor were present, it was unanimously decided to publish the Journal.

The following resolutions were then adopted:

"1. The editor is to take direct supervision of the work, and for business purposes should employ a clerk competent to assist in all business matters.

"2. For assistance in editorial work he should select an assistant competent to collect and write up the progress being made in all departments of medical science, and should engage reliable correspondents.

"3. He should establish correspondence

with secretaries or proper officers of all State medical societies, with view to procuring official and private contributions to its pages.

"4. Through his clerks he should solicit advertisements from all medical educational institutions and hospitals open for clinical instruction, book-publishers, pharmacutists, instrument-makers, and all other legitimate business interests; but all advertisements of proprietary, trade-mark, copyright, or patented medicines should be excluded. [This announcement was received with loud applause.] Neither should any advertisement be admitted with one or more names of members of the profession as endorsers, having their official titles or positions attached." (Renewed applause.)

The publication was awarded to the firm of A. D. Newell & Co., of Chicago, and Chicago was chosen as the place of publication.

It is thus seen that the Board had complied with all the instructions given them.

The report of the Board of Trustees was adopted with enthusiasm, after which Dr. McMurtry, of Tennessee, secretary of the Board, announced that, in conformity with the authority invested in the Board, it had elected Dr. N. S. Davis editor of the Journal.

Dr. Davis, in a few remarks, said that he accepted the duties thus conferred upon him, fully appreciating the difficulties and responsibilities which they involved, although it had caused him more hesitation and required a longer period of consideration than any other question in his life. Although the *British Medical Journal* had been referred to as our model, he deprecated criticism and comparison for several years to come, as that Journal did not attain its present standing until after many years. He announced that the Journal might be expected to appear about July 1, and stated that Dr. William Lee, of Washington, D.C., had consented to prepare reports on medical progress, which should present all the important advances in medical science throughout the world.

On motion of Dr. Bush, of Delaware, a vote of thanks was tendered to Dr. Davis for his willingness to serve the Association as editor of the Journal, and for his arduous and faithful labors.

Dr. Atkinson stated that he was personally so warmly interested in the success of the Journal that he would contribute his services without compensation for the coming year, in order that the funds might prove sufficient to establish it.

Dr. Cohen moved that the Association issue an annual volume, containing merely the minutes, but otherwise uniform with the previous annual Transactions. This motion was referred to the Board of Trustees for decision.

REGISTRY BLANKS.

A delegate, Dr. Palmer, of Michigan, inquired with regard to the binding force of

the blanks offered for signature,—whether such subscription would prevent any change being made subsequently in the Constitution, By-Laws, or Code of Ethics. The Chair informed him that they were only binding so long as they were the laws of the Association: this would not prevent changes made in the prescribed and proper method.

ADDRESS ON MEDICINE.

Dr. J. H. Hollister, of Chicago, chairman of the Section on Practical Medicine, read an able address, presenting a review of some of the principal medical subjects which had engaged the attention of the profession during the year. He insisted upon the position of medicine as essentially a department of physical science, and upon the need of pursuing scientific methods in its study, and warned against hypothetical and unsettled premises as foundations for practical conclusions.

In medicine, forces, mental and material, interchangeable, interdependent, and inseparable, manifest themselves in ways so manifold, and with so many essential facts undiscovered, that reason is compelled to thread her way with steps slow and uncertain, sometimes in truth, oftentimes in error, ever painfully conscious of her weakness and of the mysteries which confront her on every side. Thus only may we account for the seemingly meagre fruitage which represents the labors for more than two thousand years of some of the ablest minds which the world has ever seen. Those great problems of health and disease, of life and death, which affect the well-being of the race, have been matters of patient investigation by many of the foremost men in every generation, and many of them have wrought out work which will endure as long as literature shall survive. But the essential causes of disease have been in the main so obscure, and in their expression so varied and complex, that the best of men have been compelled to conclusions largely inferential.

The past year has been very prolific of trustworthy, accurate, and able workers. Probably no year in the world's history has witnessed an equal amount of legitimate original investigation. He praised the critical, earnest spirit manifested by these men, each ready to contribute his share to the light of science, and to repudiate everything unverified, or criticize and reject where the data are insufficient. He called attention to the co-operation of men of science of different nationalities, and in illustration said that neither Germany, France, nor Switzerland is indifferent when Bizozero speaks from Italy, nor is the Old World regardless of the New.

Secondly, the medical journalism of the year claims favorable comparison with that of any year that has gone before.

Thirdly, the masses of the profession are steadily ascending to a higher position of at-

tainment. The physicians of the present day read more, they think better, they practise their profession with more intelligence and with better results. At no time before were there so many talented and industrious physicians working in all the domain of medicine and surgery as there are to-day. Feats are now accomplished by hundreds of operators which would have immortalized either of them not a hundred years ago; and pathological investigation and physical diagnosis have reached a point never before attained.

Referring to the modern pathology, he quoted the opening sentence of the "Dictionnaire Annuel" for 1882, in the words of Garnier, "*Des microbes, toujours et partout des microbes. Rien que des microbes.*" He continued, "The discoveries of science are not always comforting, and I doubt whether it is really conducive to our happiness to discover what animated bodies we possess." The microscope commands the advance to-day, and he acutely observed that "assertions based upon its revelations, be they true or false, can only be tested, *accepted or rejected*, by authorities equally skilled in microscopy. In this field no man can speak with authority who cannot with equal skill review the work of other men." Speaking of the present degree of perfection of the microscope, he said that the limit of measurement in microscopy is $\frac{1}{1000}$ of an inch, but beyond this lies the molecule and the atom. It is idle to speculate as to when or where the limits of human vision shall finally fall; but from the diligent study of what lies within the present range of vision there certainly can come no harm,—there certainly is promise of great good.

Two subjects more than any others claim our attention at the present hour: one is the composition of the blood; the other is the agency of microphytes in the production of disease.

He further referred to the importance of the researches of Bizozero on the blood, and the discovery of *blutplättchen*, and the rôle they are asserted to play in the development of fibrin, for if this view be accepted the late theories of fibrin-formation by the agency either of a ferment or of chemical affinities are set aside, and the morphological changes noticed by the degeneration of these cells must be accepted instead as the essential fact in fibrin-formation. In this connection he called attention to the observation of Norris on the third corpuscle of the blood, and acknowledged priority for him in this direction. The reticulum claimed by some as existing in the red blood-corpuscles, he stated, was an optical delusion, caused by the imperfect focusing of the microscope. The careful investigations of Dr. Lester A. Curtis were referred to with approbation, being considered as of great value. In these observations, recently published, this supposed third corpus-

cle of Norris is well shown. It was considered as a pathological appearance due to altered nutrition and structural change in the blood.

Speaking of microscopic organisms as causes of disease, he referred to Koch's contributions, and especially to his demonstrations of the bacillus tuberculosis, as painstaking, admirable work, and reviewed his methods with approbation. The question whether these organisms are causative or only concomitant remains to be settled. In some diseases the connection between the disorder and the low organic forms has been quite well demonstrated. He believed that anthrax stands at the head of diseases that can be propagated by inoculation with specific bacteria. Erysipelas is also coming to be classed in the list of parasitic diseases. There are good reasons, therefore, for accepting the germ-theory of some forms of specific disease. He warned against carrying out this view, however, in clinical medicine to such an extent as to adopt a germicide treatment for disease, for fear that in attempting to destroy the germs we may poison the patient.

Referring to the law recently adopted in Italy, restricting the sale of patent medicines and requiring their exact composition to be stated, he inquired, "How long shall enlightened America fall so far behind Italy in the enactment and enforcement of similar laws?"

He concluded, "With a view to the advancement of medical science in America, to the end that its people may command a better service, and that in the advancement in the years to come the profession in our country may be more creditably represented, I shall crave your indulgence while I close this paper with the following questions and suggestions:

"Is the time not nearly at hand when the medical men of the United States shall be prepared to institute something like the following action?—

"Let the medical profession in each State, in such manner as seems most satisfactory, designate one of their number to constitute, with a like appointed member from each of the other States, a nominating board.

"Let it be the duty of this board to nominate a list of men suitable for appointment by the President as members of a medical bureau, to be constituted with specific powers and duties: in this bureau, composed, say, of ten members, let the army, the navy, and the marine service have proper representation.

"Let the members of the bureau be subject to removal only for cause (one of which shall be the attainment of a specified age), and receive a salary each of not less than ten thousand dollars annually, to be paid by those who are applicants for the degree of doctor of medicine.

"Let the laws of the various States be so modified that the power of conferring medical degrees shall rest *solely in this body*.

"Let sessions for examinations be held in all the States at such times and places as wisdom may dictate, to the end that all medical students shall have ample facilities for attendance.

"Let the standard of requirements be reasonable, but at the same time such as shall inspire ambition among the students and respect at home and abroad.

"Let students graduated by the National Medical Bureau receive an honorable distinctive title,—say that of National Fellow of Medicine.

"In due time let all governmental appointments, as in the army and navy and in the marine hospital service, be made from this list. In all contract services and marine and railway service let such graduates have preference, and in all public positions let them receive encouragement; let the State Boards of Health be ordered, after a specified time, to require that those only who are thus graduated may legally practise medicine in the several States.

"The higher interests of our commonwealth are inseparably related with the highest attainment possible in the successful treatment of disease. Let it be made clearly apparent to the Legislatures of the several States, and to the National Government, that the general good can best be served by this procedure, and the necessary laws would be speedily enacted.

"To such a movement the colleges could offer none other than a selfish opposition; and how long would the will of the few hundreds of professors stand in the way of the express convictions of tens of thousands of physicians?

"Let physicians encourage only those to enter upon the study of medicine whose ability and previous education give reasonable assurance of an honorable graduation. Let them advise the attendance of those students only at such medical colleges as have made this provision for final graduation, and all respectable colleges would soon fall into line."

He asked, in conclusion, that the profession begin emphatically to assert its own self-respect by calling a halt and requiring that the indiscriminate grinding of diploma-mills shall cease. With the medical profession of America such an advance is possible; in it is vested the power to correct abuses which are only too apparent.

In the adoption of such a plan, wisely and impartially executed, he could see the possibility of a degree of medical culture such as the world has not yet seen.

On motion, this address, which had been listened to with great interest throughout, was referred to the Committee on Publication.

ADDRESS ON OBSTETRICS.

Dr. J. K. Bartlett, of Wisconsin, presented

his address on obstetrics, which was read by Dr. Nicholas Senn, of Milwaukee.

At the outset he discussed some of the surgical questions of gynecology. With regard to Emmett's operation, he believed that undue importance had been attributed to the lesions of the cervix, and that the value of the operation had been exaggerated. Experience, however, has served to present more definite indications for the performance of the operation and to give clearer conceptions of its range of applicability, thus leading to a more just appreciation of its real merits. Battey's operation and Tait's operation were also discussed in the same cautious and temperate manner. The treatment of extra-uterine pregnancy by electricity, as practised by Thomas, was referred to in terms of commendation as a safer and surer means of relief than any other discovered previously, and several successful cases were quoted. The operation of transfusion of blood for post-partum hemorrhage, although theoretically of great value, had been found in practice to be of limited service. He recommended the use of saline solutions, as being convenient, safe, and efficient.

Turning his attention to obstetrics proper, he discussed the use of the obstetric forceps, and advised caution and skill in their employment. They should be resorted to only where the condition of the mother or child seems to require them, never for the purpose of saving the time of the medical attendant. He referred to a form of forceps lately recommended by Dr. Alexander Duke, of Dublin, which are to be attached to a belt fastened around the waist of the accoucheur, in order to enable him to exercise more tractile force, and he suggested that a one-horse-power electric motor might be substituted; which, by doing all the pulling, would relieve both the operator and the mother of any exertion whatever. Ergot he had found to be most efficient in cases of delay in the second stage of labor due to insufficient contraction, where no pelvic obstacles exist. He uses a recent infusion (gr. xxx to fʒij), giving a tablespoonful every thirty minutes until some result is apparent. The employment of anesthetics was advocated in labor to relieve suffering: they should not be given for their full effect, but simply to the extent of dulling the sensibility to pain without loss of consciousness. Cleanliness was spoken of as the great prophylactic to septic poisoning; and as regards intra-uterine injections, their beneficial effect he regarded as being more attributable to their detergent effect than to any specific antiseptic action.

In conclusion, he referred to the connection between pelvic disorders and general ill health, and claimed that general treatment is often as necessary as local measures. No one who has not received thorough training in general medicine, and has not by many years

of general practice tested, confirmed, and enlarged his knowledge, is fitted to be a specialist. When medical gynecology is thus studied and practised, aided by general and local therapeutic and hygienic resources, which such research in time will develop, the clearer and surer will be the diagnosis which the future will bring, and the time will soon come when the present brilliant triumphs of the surgical gynecologist will grow pale before the achievements of his medical co-workers.

This address was likewise referred to the Committee on Publication.

REPORT ON NECROLOGY.

Dr. J. M. Toner, chairman of the Committee on Necrology, presented a report, which was referred, without reading, for publication.

NEW TRUSTEES OF THE JOURNAL.

The President announced the action of the Nominating Committee with regard to filling four vacancies in the Board of Trustees of the Journal,—the first a successor to Dr. Davis; the other three, as their terms had expired, were renominated: Drs. A. Garcelon, Maine; J. O. Hooper, Arkansas; L. S. McMurtry, Kentucky; and J. H. Hollister, Illinois. These nominees were unanimously elected by vote of the Association.

Third Day, Thursday, June 7.—Prayer was offered by Rev. N. S. Rulison, D.D., at the opening of the meeting at 9.30 A.M.

FOREIGN DELEGATES.

The Secretary announced the receipt of a letter from the Secretary of the International Medical Congress, inviting the Association to send delegates. The President made the appointments to the next session at Amsterdam, as follows: Drs. G. J. Engelmann, of St. Louis; W. M. Finley, of Altoona, Pa.; Walter L. Ziegler, Lancaster County, Pa.; M. H. Alter, Armstrong County, Pa.; R. B. Cole, San Francisco; James H. Warren, Boston; C. H. Von Klein, Hamilton, Ohio; W. M. Lawlor, San Francisco; Henry Martin, Boston; J. C. Hutchison, Brooklyn; A. M. Hawes, Detroit; Edward Borck, St. Louis; T. F. Prewitt, St. Louis; E. P. Allen, Pennsylvania; H. McCall, Michigan; I. N. Quimby, New Jersey; and S. C. Gordon, Maine.

TIME OF MEETING OPTIONAL WITH THE NOMINATING COMMITTEE.

On motion of Dr. D. M. Keller, of Arkansas, an amendment authorizing the Nominating Committee hereafter to fix the date of the annual meeting, instead of adhering to a prescribed time, was taken from the table and adopted.

RESOLUTIONS OF RESPECT.

The following resolutions were presented by Dr. Foster Pratt, having been adopted in the Section on State Medicine:

"*Resolved*, That the labors of Dr. William Farr, of England (recently deceased), in the organization, classification, and compilation of vital statistics,—labors begun in 1838, and perseveringly, wisely, and ably continued by him for nearly half a century,—are recognized by the medical profession of the United States as an enduring monument of his ability and learning as a physician, as the real foundation of our own sanitary science, and as a perpetual blessing to present and future generations of our universal humanity, entitling his name and fame to stand with that of other great men whose genius and labors have resulted in beneficial revolutions of the medical and sanitary thought and activities of the civilized world." Adopted.

Resolutions of condolence to the wife and family of Dr. Hubbard, of Ashtabula, who died suddenly while the Association was in session, were offered by Dr. Reed, of Iowa, and were adopted and ordered to be spread upon the minutes.

RESTRICTIVE LEGISLATION WITH REGARD TO THE SALE OF POISONS.

On motion of Dr. D. H. Batchelor, of Rhode Island, a committee was directed to be appointed to address the Legislatures of the several States, by petition or otherwise, requesting the enactment of more stringent laws with regard to the sale of toxic agents.

TRAINING OF NURSES.

Prof. S. D. Gross presented the following, which was adopted:

"*Whereas*, Good nursing is of paramount importance to the comfort of the sick and to the restoration of their health; and

"*Whereas*, The subject is one which strongly addresses itself to the common sense and kindly sympathy of every intelligent member of society: therefore

"*Resolved*, That this Association, fully recognizing the importance of the subject, respectfully recommends the establishment, in every county and town in our States and Territories, of schools or societies for the efficient training of nurses, male and female, by lectures and practical instruction to be given by competent medical men, members, if possible, of county societies, either gratuitously or at such reasonable rates as shall not debar the poor from availing themselves of their benefits."

SECTION ON PSYCHOLOGICAL MEDICINE.

An amendment establishing a Section on Psychological Medicine was offered by Dr. W. Hay, of Chicago, and laid over, under the rule, for one year.

REPORT OF THE COMMITTEE ON METEOROLOGY, ETC.

Dr. N. S. Davis, chairman of the Standing Committee on Atmospheric Conditions

and their Relation to the Prevalence of Diseases, read the annual report. He detailed a number of experiments and observations made at twelve different stations, especially with regard to ozone and organic constituents of the atmospheric air. One observer, Prof. Long, returned valuable statistics, showing, among other features, the amount of organic impurity in the air for each day of last year. The chairman stated that he believed this to have been the first complete record of the kind kept in this country or in any other.

The committee offered its report for publication as part of the Transactions of the Association, and asked to be continued. It also expressed thanks to General Hazen, Superintendent of the United States Signal Service, for valuable services rendered. The resolution introduced yesterday relative to the appointment of stations of observation, which shall furnish data in regard to the effect of the atmosphere in certain localities with reference to pulmonary diseases, by Dr. Didama, was, on motion, taken from the table, and referred to this committee.

At the request of the chairman, Dr. Davis, Dr. Didama, of Syracuse, was added to this committee.

REVISION OF THE CODE OF ETHICS.

A series of resolutions offered by Dr. S. Pollak, of St. Louis, and emanating from the St. Louis Medical Society, asking that a committee be appointed to take into consideration the advisability of revising the Code of Ethics, was promptly laid upon the table.

A motion, made by Dr. Brodie, that all papers shall have the approval of the chairman of the Section before which they are to be read, was likewise laid upon the table.

ADDRESS ON SURGERY.

Dr. W. F. Peck, of Davenport, gave an interesting and able *résumé* of the principal topics of surgical interest which occurred during the past year, and detailed some of the evidences of progress. The relation of Koch's hypothesis to articular disease of a tubercular character was mentioned, but was not regarded as satisfactorily settled. He did not believe that practical surgery had been directly benefited by Koch's experiments and teachings, but the germ-theory of the origin of septicæmia, pyæmia, abscess, gangrene, inflammation, etc., supported by experience, will tend to give new and more efficient reasons for the use of antisepticism in practice. Greater confidence in the details of operative procedure, and scrutinizing attention to cleanliness, have certainly been suggested by these recent investigations. Antiseptic treatment does not necessarily imply carbolic acid, although, in experiments made by Dr. A. T. Cabot, of Boston, upon detached dead tissue, it was found that it acted more

promptly than any other agent in arresting putrefaction and destroying micro-organisms of decomposition.

The antiseptic method may be regarded as embracing, besides the spray, the close and fixed apposition of wounded surfaces, rest, pure air, hygienic surroundings, and drainage if practicable.

Referring to the acknowledged lessened mortality from grave operations, he asked, how can this change be explained? He did not believe that it would be maintained that it was solely due to antisepticism as practised by Lister, but he attributed it to greater attention to the minutiae of operation, and strict cleanliness. In forty-eight cases he had performed abdominal section,—forty-six for the removal of ovarian tumors, once for adherent ovary, once for intestinal obstruction. Of the first thirteen, operated upon under the spray and using carbolic solution for washing, there were six deaths. In the remaining thirty-one ovarian operations, as well as the oophorectomy and laparotomy, the spray was not employed. Both of the latter cases recovered, and twenty-seven of the ovariectomies. He explained this on the grounds already mentioned. The use of the electric light as a means of illumination for surgical operations, the Thompson operation of exploring the vesical cavity, the feasibility of gastrotomy for cancer of the pylorus, laparotomy for intestinal obstruction, nephrorrhaphy, ligature of the innominate artery, and a new method of ligature of spermatic veins in the treatment of varicocele, were all discussed in this paper, which was referred to the Committee of Publication.

ADDRESS ON STATE MEDICINE.

Dr. Foster Pratt, of Michigan, chairman of the Section on State Medicine, then read the annual address. Without stopping to dwell upon any special topic suggested by the history of last year, he called attention to the great change in public sentiment upon sanitary questions which had occurred in the decade since the establishment of a Section on State Medicine in 1873 in this Association. In reviewing what has been accomplished, he said, "Sanitary organization and machinery have been developed, and to a great degree perfected; men have been educated for special work; books, lectures, and discussions have greatly multiplied, clearly indicating an appreciation of the work by the public and a desire for more knowledge on the subject. The heating, lighting, and ventilation of our homes and other buildings have been improved; the influences which vitiate the air have been removed, or methods for their neutralization adopted." The causes of disease depend largely upon fixed physical laws, and by the discovery of these we may be able to prevent disease. Prior to 1873, only two States in the Union had State Boards of

Health; now, in twenty-nine States sanitary organizations have been adopted, while eleven still refuse to make any provision for a State Board of Health; but ere long every State in the Union will fall into the line of advancement, and then a majority of States will demand a National Board of Health. What then will Congress do? The agency and aid of the American Public Health Association in procuring these results, as well as the influence and teachings of family physicians, were mentioned in terms of grateful recognition.

The practice of isolation of cases of contagious diseases has done much to prevent their spread. Dr. Pratt next referred to the admirable work done by the late Dr. Farr, of England, in originating the work of collecting vital statistics. He then gave a description of advanced methods of work in his own State: these included sanitary meetings at which papers on sanitary questions were read by physicians, ministers, dentists, and others, including ladies. By recent improvements in sanitary science he did not hesitate to assert that five per cent. has been added to male and eight per cent. to female life. In this connection he spoke of the useful work of Dr. H. B. Baker, of Brooklyn, in vital statistics, and commended it for its faithfulness and ability, and he invited attention to the work performed in his own State, as shown by the annual volumes of the State Board of Health.

Speaking of the great interest manifested in the treatment of the insane, and the increased belief in the curability of these unfortunates and their restoration to the duties of life, he was inclined to look upon this as a possible danger to society and as tending to increase the amount of insanity in the community. The question of the prevention of insanity is increasing in importance, and forms a problem in State medicine of present interest.

Referring to expert medical testimony, he believed that expert medical evidence occupies an uncomfortable and undignified relation to American law and practice, but there does not seem to be for the present any hope of relief. When our law of trials will permit courts to determine who are experts, and to call them to testify for *science* and relieve them from the appearance of testifying for a *side*, their evidence will command more truly than now the respect and the confidence of courts, juries, parties, and people. He in conclusion suggested a change in the title of the Section which he had under his charge at this session. It should be "State Sanitation" instead of State Medicine, its object being the medico-legal prevention of disease.

TREASURER'S AND LIBRARIAN'S REPORTS.

The Treasurer, Dr. R. J. Dunglison, presented his report, showing a balance on hand of \$903.93, which was audited and found correct. The Librarian, Dr. C. H. A. Klein-

schmidt, of Washington, D.C., in his report announced that there were 1817 distinct titles and 5713 volumes, including pamphlets, in the library. The report was adopted, and \$200 was placed at the disposal of the Librarian for binding, etc. The subscription of \$50 for the Index Medicus was likewise continued.

COMMITTEE OF PUBLICATION.

Dr. Albert Frické, chairman of the Publication Committee, presented the thirty-third annual volume of Transactions to the Association, which had been duly published and distributed. He also announced that an index of the entire series of volumes of Transactions had been prepared, and would soon be ready for delivery to the members. It was stated that 1500 copies had been ordered, at a cost of \$500, and it was recommended that a charge of one dollar per copy for this index be made. The report was adopted.

REPORT OF NOMINATING COMMITTEE.

The Committee on Nomination then reported the following officers: President, Austin Flint, Sr., of New York; Vice-Presidents, R. A. Kinloch, Charleston, S.C., T. B. Lester, Kansas City, Mo., A. L. Gihon, U.S.N., S. C. Gordon, Portland, Me.; Treasurer, R. J. Dunglison, Philadelphia; Librarian, C. H. A. Kleinschmidt, Washington, D.C. The place of meeting for 1884 is Washington, D.C., on the first Tuesday of May. The chairman of the Committee of Arrangements is Dr. A. Y. P. Garnett, of Washington, D.C. Assistant Secretary, Dr. D. W. Prentiss, of Washington, D.C.; Judicial Council, Drs. F. D. Cunningham, Virginia; H. O. Marcy, Massachusetts; W. O. Baldwin, Alabama; J. S. Billings, U.S.A.; Freeman W. Miller, U.S.M.H.S.; Eugene Grissom, North Carolina; R. N. Todd, Indiana; to fill vacancy in Judicial Council for class 1884, Dr. E. W. Clark, Iowa.

The chairmen and secretaries of the various Sections were then read, as follows: *Practice of Medicine*: chairman, Dr. J. V. Shoemaker, of Pennsylvania; secretary, Dr. W. C. Wile, of Connecticut. *Obstetrics and Diseases of Women*: chairman, Dr. T. A. Reamy, of Cincinnati; secretary, Dr. J. T. Jelks, of Arkansas. *Surgery and Anatomy*: chairman, Dr. C. D. Parkes, of Illinois; secretary, H. O. Walker, of Michigan. *Ophthalmology, Otolaryngology, and Laryngology*: chairman, J. J. Chisholm, of Maryland; secretary, Dr. Thompson, of Indiana. *Diseases of Children*: chairman, Dr. William Lee, of Maryland; secretary, Dr. W. R. Tipton, of New Mexico. *Dental and Oral Surgery*: chairman, Dr. T. W. Brophy, of Illinois; secretary, Dr. John S. Marshall, of Illinois. *State Medicine*: chairman, Dr. D. J. Roberts, of Tennessee; secretary, Dr. Franzoni, of Washington, D.C.

The Committee on State Medicine consists of one member from each State of the Union, as follows: Alabama, Jerome Cochran; Ar-

kansas, J. J. McAlmont; California, W. F. McDermott; Colorado, Charles Denison; Connecticut, C. W. Chamberlain; Dakota Territory, J. B. Van Valzah; Georgia, J. P. Logan; Illinois, O. C. De Wolf; Indiana, George Sutton; Iowa, W. S. Robertson; Kansas, D. W. Stormont; Kentucky, J. P. Thompson; Louisiana, S. C. Chaillé; Maine, S. H. Weeks; Maryland, John Morris; Massachusetts, H. J. Bowditch; Michigan, F. K. Owen; Minnesota, C. N. Hewitt; New Mexico, M. M. Milligan; District of Columbia, S. Townshend; Delaware, L. P. Bush; Oregon, H. Carpenter; Mississippi, H. H. Gault; Missouri, Lester Hall; Nebraska, L. B. Larsh; New York, E. M. Moore; New Jersey, Ezra M. Hunt; North Carolina, James McKee; Ohio, T. L. Neal; Pennsylvania, R. J. Dunglison; Rhode Island, C. H. Fisher; South Carolina, Manning Simmons; Tennessee, C. C. Fite; Texas, Thomas D. Wooten; Vermont, S. W. Thayer; Virginia, J. L. Cabell; West Virginia, Dr. Moffit; Wisconsin, J. T. Reeve; United States Army, J. P. Smith; United States Navy, J. M. Brown; United States Marine Hospital Service, P. H. Bailhache. The Committee on Necrology consists of one member from each State: J. M. Toner, Washington, D.C., chairman; Alabama, R. F. Michel; Arkansas, Jos. C. Turner; California, Henry M. Gibbons, Jr.; Colorado, Charles Denison; Connecticut, C. H. Pinney; Dakota Territory, J. B. Van Valzah; Georgia, H. F. Campbell; Illinois, J. H. Chew; Indiana, William Lennox; Iowa, S. B. Chase; Kansas, C. V. Mottrem; Kentucky, W. S. Reynolds; Louisiana, Ernest Lewis; Maine, A. J. Fuller; Maryland, Christopher Johnson; Massachusetts, John H. Gilman; Michigan, William F. Breaky; Minnesota, F. A. Densmore; Mississippi, Wirt Johnson; Missouri, H. H. Mudd; Nebraska, R. C. Moore; New York, H. D. Didama; New Jersey, G. T. Welch; North Carolina, Hubert Haywood; Ohio, Starling Loving; Pennsylvania, Frank Woodbury; Rhode Island, W. E. Anthony; Tennessee, J. B. Lindsley; Texas, W. D. Knox; Vermont, A. F. Fassett; Virginia, L. B. Edwards; West Virginia, S. L. Jepson; Wisconsin, E. L. Boothby; United States Army, W. S. Forwood; United States Navy, G. L. Gihon; United States Marine Hospital Service, Walter Wyman; South Carolina, F. P. Porcher; New Mexico, W. H. Page; District of Columbia, William Lee; Delaware, W. Marshall; Oregon, W. H. Carpenter. At the conclusion of the report, which was formally adopted, the following letter from Dr. Austin Flint was read by Dr. Didama:

"GENTLEMEN,—Circumstances render it necessary for me to return to New York. Will you kindly express to our brethren the members of the American Medical Association, with my sincere thanks, an assurance that I thoroughly appreciate the great honor which has been conferred upon me?"

"I accept the honor, feeling assured that I may confidently expect co-operation and indulgence in my efforts to fulfil the duties which it involves.

"Yours very truly,

"AUSTIN FLINT.

"CLEVELAND, OHIO, June 7, 1883."

It having been asserted that Dr. A. L. Gihon, of the United States Navy, was not quite sound in his adherence to the Code, that gentleman addressed a letter to the convention in which he affirmed his strong adherence to it, which was read amidst applause.

On motion, the Secretary was authorized to cast the ballot of the Association for the above list of names, and they were declared unanimously elected.

Fourth Day, Friday, June 8.—Session opened, at 9.30, with prayer by Rev. Charles Terry Collins, the President in the chair.

After some remarks by the chairman of the Committee of Arrangements with regard to the afternoon excursion to River Bank, the routine business was taken up.

REPRESENTATION FOR INDIAN SERVICE.

Dr. N. S. Smith, of Dakota, offered an amendment to the Constitution to provide for the admission to membership of two delegates from the Medical Bureau of the United States Indian service, to be nominated by the surgeon-in-chief of that bureau and approved by the Secretary of the Interior. The amendment was laid on the table until next year.

AMENDMENTS WITH REGARD TO THE OFFICE OF PERMANENT SECRETARY, ETC.

Dr. J. M. Toner withdrew his amendment abolishing the office of Permanent Secretary, inasmuch as that officer had donated the usual appropriation for his services to aid in establishing the Journal.

Dr. Sears offered an amendment, which was laid over, that the chairmen and secretaries of the several Sections be empowered to invite earnest workers to attend their Sections.

An amendment allowing permanent members to vote was indefinitely postponed.

HEARING OF LOCOMOTIVE ENGINEERS.

Dr. Turnbull, of Philadelphia, read a communication with regard to the hearing of engineers, and offered a resolution that the Legislature of each State be petitioned to pass a law requiring railway employes to be examined as regards their hearing before taking charge of any railroad-train. This was, on motion, referred to the Section on Otology, etc.

REPORT FROM THE JUDICIAL COUNCIL.

The report of the Judicial Council was presented by Dr. N. S. Davis. In regard to the petition of Dr. D. W. Day, asking for a rehearing of his case, which was adjudicated last year, the council ordered the return of the petition of Dr. Day, with leave granted

to supplement said paper by a written statement of the character of the new evidence which he proposes to introduce, and the council decline to act upon the case until the opening of the session of next year, from the impossibility of notifying all the parties concerned. In the case of Dr. D. H. Goodwillie, of New York, the council decided that the registration of Dr. Goodwillie be cancelled and that the annual dues be returned to him.

SANITARY SERVICE ON OCEAN VESSELS.

Dr. Foster Pratt, of Michigan, introduced a resolution by Dr. A. N. Bell, from the Section on State Medicine, requesting that Congress be urged to consider the importance of a competent medical and sanitary service on board all transoceanic and passenger vessels, and that a committee of five be appointed to promote the object and report at the next session. Referred to a committee consisting of Drs. A. N. Bell, of New York, A. L. Gihon, U.S.N., I. N. Quimby, of New Jersey, H. O. Marcy, of Massachusetts, and Henry H. Smith, of Pennsylvania.

Dr. A. N. Bell then introduced the following resolutions:

READING OF PAPERS.

"Whereas, The practice prevails of reading papers before the several Sections at the option of their authors, without sufficient regard to the special objects for which the Sections were created: therefore,

"Resolved, That all papers hereafter offered or intended to be read before the Association, or any of its Sections, except the addresses of the President and the chairmen of the Sections, shall be first referred to the trustees of the Journal, for classification and appropriate reference."

The resolution was tabled.

DEATH OF SURGEON-GENERAL BARNES.

Dr. Brodie, of Michigan, introduced the following resolutions:

"Whereas, The Association takes a deep interest in the efficiency of the Medical Department of the United States Army; and

"Whereas, The late chief of the department, Surgeon-General Joseph K. Barnes, contributed largely to the efficiency of this department in the work which it has been and is doing for medical science and education: therefore

"Resolved, That the Association receives with profound regret the information of the death of General Barnes, and desires to record its appreciation of the great value and importance of the work which he has done and enabled others to do for the advancement of medical science.

"Resolved, That this Association recognizes the energy and ability which characterized the administration of General Barnes and his services in connection with the Army

Medical Museum and Library and publication of the 'Medical and Surgical History of the War,' and other works of great value to the profession.

"*Resolved*, That a copy of these resolutions be sent to the Surgeon-General of the army."

These resolutions were adopted and ordered to be spread upon the minutes.

CREMATION A NECESSITY.

Dr. Keller, of Arkansas, offered a resolution that in the very near future, if not now, cremation will become a sanitary necessity in the large cities and populous districts of the country. This was adopted, and, by request, referred to the Committee on Hygiene.

ADDRESS ON DISEASES OF CHILDREN.

Dr. R. F. Blount was excused from delivering his report of the Section on Diseases of Children, and the address was referred to the Board of Trustees for publication without being read.

RESOLUTIONS OF THANKS.

Dr. I. N. Quimby, of New Jersey, introduced a lengthy and effusive series of resolutions of gratitude to the citizens of Cleveland for their hospitality, which were adopted.

It was resolved to tender a vote of thanks to the Secretary and Treasurer for the efficient and satisfactory manner in which they have discharged their several duties.

DELEGATES TO THE CANADA MEDICAL ASSOCIATION.

The President appointed Drs. W. Brodie and H. L. Walker delegates to the Canada Medical Association.

Dr. Eve, the secretary of the Surgical Section, then exhibited an appliance for the extension of the arm, not previously exhibited.

All reports of the various Sections were, by motion of Dr. Brodie, of Michigan, referred to the Board of Trustees for publication in the Journal.

Dr. Atlee, in retiring from the Presidency, said,—

"Gentlemen, I am about to vacate the position with which you have honored me, and in doing so it is with the greatest satisfaction. I had expected to have the honor of inducting into the chair a gentleman who is in every respect most worthy of it, and whose unavoidable absence this morning I heartily regret,—a gentleman who has done as much for the medical literature of the country as almost any other, and one I characterized a few days ago in a very different place,—the Laennec of America. I most heartily thank you for the support you have given me, and I can only say that I hope you will forgive me my shortcomings. I bid you an affectionate farewell."

Dr. Alonzo Garcelon, of Maine, then offered the following resolution:

"*Resolved*, That the thanks of the Association be extended to Dr. J. L. Atlee, the retiring President, for the able, dignified, and satisfactory manner in which he has presided over the deliberations of the Association, and that he retires with the best wishes of every member of the Association for the long continuance of a life so highly useful not only to the present but to all future generations."

This was adopted unanimously.

Dr. Lester, the Second Vice-President, in the absence of the President, announced the Association adjourned to meet in Washington City the first Tuesday of May, 1884.

Owing to the early appearance of the *Journal of the American Medical Association*, containing the numerous papers in full, with the official report of the Sections, we shall not devote space to abstracts of them here. The papers were numerous and fully up to the usual standard.

DR. ANDREW CLARKE ON RENAL INADEQUACY.

—In an interesting address recently, Dr. Clarke, President of the Clinical Society, discussed a subject of considerable importance. He has recognized a class of cases in which the function of the kidneys is poorly performed; the urine is not normal in its composition, being of low specific gravity and deficient in solid constituents, especially the nitrogenous elements. This condition may continue through life and impair vitality without being suspected, or it is believed that it may develop into some form of Bright's disease. There are no special symptoms, but if a patient complain of malaise or headache, sleeping poorly, weak and unable to work well, this condition should be suspected and the urine examined; if it be below 1010, in quantity less than fifty ounces, and its proportion of urea below two per cent., then, whether there be albumen or not, whether there be casts or not, whether granular debris be deposited or not, he says that we may know with certainty that the kidneys are not doing their duty. If proper care be taken and compensation made for the defective kidney, the prognosis is not very unfavorable, and the case may attain its allotted term of life. Treatment is pre-eminently hygienic, and in the main identical with that pursued in chronic albuminuria.—*British Medical Journal*, February 24.

ELECTRIC LIGHTING FOR SURGICAL EXAMINATION OF CAVITIES.—Helot and Trouvé have invented a small electric lamp, to be worn in place of the laryngoscopic head-mirror on the forehead. It is connected directly with a bichromate battery, instead of an accumulator, although this may also be used. It is described and figured in *Le Progrès Médical* (No. 17).

ORIGINAL COMMUNICATIONS.

MEDICAL AND VITAL STATISTICS:
ARE THEY RELIABLE?

Read before the Philadelphia County Medical Society,
March 28, 1883.

BY PHILIP LEIDY, M.D.,

Philadelphia.

GENTLEMEN,—I have selected for this evening the subject of "Medical and Vital Statistics: are they reliable?" The subject is one of the most important in sanitary science. It has no doubt occurred to some of you that there are defects which might be remedied, and errors discovered which might be corrected, in the system as adopted. As to the statist, as he continues his studies, he will find that his discoveries are not new,—that there are various practical objections to his proposed improvements, and that it is much easier to confine his objections to that which is than to point out clearly and definitely that which ought to be, and which is at the same time demanded. Statistical registration includes the records of all circumstances affecting the production or duration of human life; it includes records of the population living at a given period, also a record of the changes taking place in a community by births, marriages, and deaths; it includes methods of preserving in an authentic and permanent form the memory of facts in pathology "as they occur and furnish material upon which future statist and pathologists will build a comprehensive and definite system of scientific medicine. Our general statistics are made through the system of the census, which, by reason of its magnitude and lack of method, must be imperfect; and authors are so well aware of this fact that general statistics are usually taken *cum grano salis*."

We have no information that the ancients had any system of registration, although the Jews, Athenians, and Romans had a system by which registration was carried out, though imperfectly. It is stated that in Japan, China, and Peru, information of this character was collected. In Egypt and in Rome records of births in certain families appear to have been kept. But the first steps towards a general registration were taken through the clergy about the beginning of the sixteenth century. The earliest registers were those kept at Augs-

burg and Breslau, which antedated the order of Lord Thomas Cromwell, in 1538, directing the keeping of parish registers in England. Little attention was paid to these English parish registers until a quarter of a century after, when a peremptory order was issued that such records should be kept in the churches, and, to afford greater security, were written on parchment. In France, in the year 1539, notice and the requirements for registration were required to be brought before the court; and by the seventeenth century such records were in general use in Western Europe. Bills of mortality for the purpose of preventing the diffusion of the plague were issued weekly in London as far back as 1603, and were continued until the present system of registrar-general was established. These bills were under the superintendence of the Company of Parish Clerks of London, first incorporated in 1233 as the Fraternity of St. Nicholas. In 1625, three hundred and ninety-two years later, this corporation obtained a decree from the Star Chamber allowing a press to be kept for the printing of bills of mortality of the city and liberties of London, for which purpose the Archbishop of Canterbury appointed a printer. In 1629 these bills were arranged to show distinction of sex and cause of death. In 1728, about a century after, the distinction of age was introduced, but the distinction of sex was shown only for the total number of deaths, and not for each disease or for each group of ages. So we see that at that early date vital statistics were almost useless,—at least chaotic.

In 1662, John Graunt, Fellow of the Royal Society, published the first treatise on Vital Statistics. The first bills of mortality in which the ages were inserted appear to have been those of Breslau. In 1667, France directed that copies of vital registers should be accepted as legal proof of the facts set forth. About this period the religious wars interfered much with the important system of registration, and it was not until the lapse of one hundred and two years—1685–1787—that Protestant registers were made legal. After the Revolution of 1789 registration passed entirely from the hands of the clergy. The parochial registers of England were exceedingly imperfect. Infants dying before baptism were not recorded; in fact, the best of them showed only burials and bap-

tisms, not the births or deaths; neither were they kept by all denominations, nor in hospitals or infirmaries having private burial-grounds. This system, though imperfect, was brought to America by the early settlers of New England, and from 1639 to the present time improvements by detail classification have been introduced, so that, notwithstanding there are still imperfections as records, they are generally accepted; not, however, without due allowance.

There are four objects sought to be accomplished by systematic registration of births, marriages, and deaths in a community.

The first is for a legal purpose, being to identify individuals in their relations to their families and to the community, and rests upon the same grounds as that of recording titles of property, etc.

Secondly, for the prevention and detection of crime.

Thirdly, so far at least as births and deaths are concerned, to furnish data for sanitary purposes; that is, to give warning of the undue increase of disease, or death presumed to be, due to preventable causes, and also to indicate the localities in which sanitary effort is most desirable and most likely to be of use.

Fourthly, to collect data for scientific purposes as bearing on the laws of human development,—a registration law which is upon the whole satisfactory in theory not infrequently becoming practically useless, owing to the character of the power selected to supervise its execution. In our own case, the general government should take the matter in hand, and, through an established permanent department regulated by proper Congressional legislation, secure proper vital statistical returns. Most of the States have registration laws, but many of them are inefficiently enforced. Some few years back the duty was imposed upon me to investigate the cases of contagious and infectious diseases officially reported to the Health Department. Cases of varicella were reported as varioloid, and varioloid as true variola,—even cases of eczema, not excluding measles; cases of simple angina as diphtheria. Now, if value is to be placed on statistics, they must be correct. If the inaccuracy just mentioned is the result of indifference, it is censurable; if it arises from the want of knowledge, it is lamentable. These

remarks do not apply to our city health department alone: such reports have been reduced to book form by some medical authors, and are given to the general practitioner as a compilation of medical facts based upon research and experience.

It is true that medical men differ frequently in their opinion, and certainly have a right to, when theory is the foundation for argument; but, when facts are demonstrated, let us acquiesce, no matter what original theories we are loath to give up.

As an illustration, I will take the disease diphtheria. The recent information with regard to the existence of that dreaded disease in our midst makes it appear that it prevails to an alarming extent. The lines have been so well defined that the connecting link has made its existence seemingly general throughout the city. I ask the question, Does diphtheria prevail to such an alarming extent as reported? From past experience, referring to the manner reports are made to the Health Department, and from information I obtain from active practitioners, who are reliable, I doubt it. That diphtheria is a distinct disease is questioned by many physicians high in authority. Reynolds, by Hartshorne, says regarding croup and diphtheria, "The opinion that membranous laryngitis, or tracheitis, 'true' croup, is a distinct disease from diphtheria has been supported by Prof. G. B. Wood, Austin Flint, J. Lewis Smith, Fordyce Barker, and others." Dr. J. F. Meigs contends against it. Besides these named abroad, C. West, Virchow, Niemeyer, Oppolzer, and Letzerich may be cited as favoring the doctrine of the *non-identity* of the two diseases. They all have their following. A table is given in Meigs and Pepper's Treatise on the Diseases of Children, which shows that after diphtheria had about 1860 become recognized in Philadelphia as a new disease, at that time the mortality from it had added for several successive years more than three hundred to the deaths in each year in that city, while the deaths from croup continued to number annually, as before, from two hundred to over four hundred. The foregoing is the difference made with croup. Now, when we refer to scarlatina in its second and third form we have still greater difficulty in getting at the proper record. In turning to the number of deaths from scar-

let fever and diphtheria, we singularly find them running hand in hand together: where scarlet fever is found diphtheria is near at hand,—yes, under the same roof. So with diphtheria. Refer to Board of Health returns, 1860–81 inclusive.

To give a reason for such uniformity would be only to speculate with the difference of opinion as regards the identity of the two diseases.

The physician who makes no distinction and pronounces his cases croup,—probably scarlet fever,—and the one who professes to recognize the difference and reports his cases accordingly, certainly tend to produce confusion and doubt.

Whilst there are, I regret to say, physicians who conceive it a matter of importance to elevate themselves in the estimation of their patients and friends by magnifying the disease under treatment, so there are others who, to relieve the distress and anxiety of devoted parents or anxious friends, resort to the opposite, and report accordingly, unless death takes place. When the cause is correctly assigned, call disease by its proper name. It is the law, and the success of our medical labors is thereby determined. As the question of identification as regards croup, diphtheria, and scarlet fever is still in the balance and unsettled, the records certainly must be unreliable as regards classification. As stated before, I have known chicken-pox represented as smallpox (aborted *à la* Hahnemann), and a neighborhood up in arms with excitement. So I have known cases of simple angina by the score pronounced diphtheria. A prominent dupe of the Hahnemann doctrine stated to me the success of his treatment of diphtheria,—that his cases recovered in a few days. To my utter astonishment, the same remark was made to the late Home Office in my hearing by a prominent physician. Let me say here, diphtheria does not get well in a few days, any more than the scarlet fever, smallpox, or typhoid fever. It is turning science into ridicule, and making a mockery of our profession. Colleagues, give all such expressions from members of the profession your positive disapproval. It is done for no honorable purpose. In our statistics of variola I have failed to find any classified statement including varioloid. We have accepted the great obstacle to compulsory vaccination in this country. The time

has not arrived when such an arbitrary step can be taken, and until the general government takes the matter in hand we are powerless. Yet it is all-important that the community should be impressed with the necessity of the protective influence of vaccination. Towards accomplishing such an end there should be furnished *locality statistics*, to refer the laity and others who happen to be sceptical. No better opportunity was afforded, and still continues, though in a less degree, during the existence of variola, for our own people in our own city to secure such a record. Cases of variola and varioloid are reported to our Health Office, no difference is made; they are all placed under one head,—“variola.” The reports are pigeon-holed,—neither useful nor ornamental. Unless interference is required, such as sending the patient to the Municipal Hospital, disinfecting the premises, etc., the whole matter as at present carried out is farcical. Now, if the protective influence of vaccination is in extent what is claimed for it, no better evidence could be given to the public than the number of protected cases, or modified variola, as compared with the number of cases of the true disease.

Statistics, as regards this disease alone, as emanating from health boards, are in a great degree unreliable, rendered so by the careless manner the reports are furnished; and, as the discrepancy holds good in this special disease, they no doubt do in others. There should be a commission of medical men appointed, who should have discretionary power to deal with all such matters as contagious and infectious disease where the health and business interests of a large city such as ours are involved. By referring to the health of English towns, we find diphtheria and scarlet fever come in for their share, also in Scotch towns, also Dublin, also Calcutta; but what a significant absence of the disease croup! Also in the general statistical returns, which the *Lancet* states are “remarkably incomplete,” and further on states that more precise mortality statistics should be forthcoming for such a city as Calcutta, which has a population little short of half a million of persons. “We are, unfortunately, still ignorant of the conditions essential to the development, and to some extent to the spread, of diphtheria; and with a view of acquiring further information as to its etiology, both the local

and government boards and the British Medical Association have instituted a series of detailed inquiries, the results of which may, it is hoped, hereafter give some indication as to how the diphtheria mortality may be lessened." (*Lancet*.) Now, it becomes the individual members of this and the other medical societies to urge upon the proper authorities the appointment of a commission to investigate disease in general, regarding causation, prevention, etc. Let there be light! I grant that it is difficult many times to reconcile difference of opinion; but where facts are pronounced such an important reference as the present subject should be carefully guarded. One word in regard to births,—one of the most important divisions of vital statistics. I have from time to time within the past fifteen years reported many cases of births where no midwife or other person having knowledge of the registration law was present,—the cases coming under my notice incidentally. How many are not reported? To give you an idea of the manner this part of the duty of the physician and others is performed, I will read an extract from a home journal: "According to their registration reports, the deaths in the city of New York continue to exceed the births. For the last year, 1882, the respective figures are thirty-seven thousand eight hundred and twenty-six deaths to twenty-seven thousand three hundred and twenty-one births (being ten thousand five hundred and five more deaths than births)." At this rate the metropolis would die out if it were not for accessions of immigrations. But the fact is, these birth-registrations have nothing in the value of accuracy about them. Ours in Philadelphia have been defective enough, on account of the default of doctors and midwives to report births to which they are professionally called. Medically and legally the system is wrong by its leniency. Therefore, our own reports are made incomplete. Of certificates of causes of death, as usually furnished, a certain proportion are worse than useless, since the cause is erroneously stated. This may be due either to a desire to conceal the true cause from the family, as in cases of syphilis, suicide, alcoholism, etc., or to carelessness and erroneous diagnosis. In many cases, post-mortem examination reveals little, by reason of the lack of knowledge of pathology.

Pathology, as taught in our medical schools, is deficient in its system, and, unfortunately, difficult to remedy at once. Much has yet to be known of cause and effect as applied by the investigator for our guidance. I have maintained for years that practical and pathological anatomy should not be separated, but advantage taken of every pathological condition which presents itself in the dissecting-room. Well persons only die by violence; hence your material is abundant. No work was ever published where more care and pains were observed than in the "Medical and Surgical History of the War of the Rebellion." Dr. Otis, in his report to Surgeon-General Barnes, June 30, 1867, says, "At the present day surgical statistics commonly encounter severe criticisms, and the results of the numerical method of medical and surgical investigation are viewed with distrust. In the collection of surgical statistics there are several special sources of fallacy. The desire for distinction of ambitious operators sometimes tempts them to report successful results prematurely, and to fail to record unfortunate cases. Feverish partisans of particular operative procedures in accumulating statistics not unfrequently evince an unpardonable disregard for the fundamental rules of evidence, and admit testimony abounding in transparent fallacies." As Dr. Otis once remarked, it was an easy matter to manufacture cases, especially for occasions and publications.

Colleagues, I have occupied your time with a subject which may appear to you at first novel and as dry as the study of dry bones to the student; but you must recognize the importance of *correct* statistics, and how unreliable they are as furnished.

THE PRESENT STATE OF THE TUBERCULOSIS QUESTION.

REMINISCENCES FROM A PILGRIMAGE TO THE MEDICAL CENTRES OF GERMANY.

BY HENRY WILE, A.B., M.D.

WHAT is phthisis pulmonum? This question reaches far back in the history of medicine. The medical leaders of every generation since the age of Hippocrates have given some answer. Each school has set up its theories, which under the light of more recent investigation were

overthrown and replaced by new ones. New theories were proposed as fast as old ones were discarded: so that the question has grown, and its literature has assumed vast proportions.

Surely there is no other subject of such importance in all the range of pathological lore,—no other so vital to the interests of humanity.

The answer of Hippocrates was that it developed from the *ulcus pulmonum*. This answer was received, with various modifications from time to time, until late in the seventeenth century, when Sylvius described the *tubercle* in the lung of phthisis.

The development of these bodies was then studied, and it was found that some soften and give rise to cheesy masses. As the cheesy masses were also observed to be a common result of inflammatory processes in scrofulous persons, the theory arose that scrofulosis and tuberculosis were closely related. Laennec (quoted after Spina, p. 6) regarded them as identical processes, because the products of both were cheesy, and he called scrofulosis tuberculosis of the lymphatic glands. This theory has its supporters to-day. Experienced clinicians, having the medical care of families, are continually showing some nexus. But later Virchow pointed out that cheesy degeneration could take place in the most varied pathological processes,—tumors of various kinds. He regarded it not as peculiar to scrofulosis or tuberculosis (*Virch. Archiv*, i., 1847).

Then the question was subjected to a microscopic investigation. The structure of the tubercle was examined, and it was found to consist of cells with an intercellular substance. Subsequently giant cells were discovered in the tubercle,* and this was held by some to be characteristic; but they were afterwards found elsewhere.

Then it was noticed that the disease was not local, but constitutional; that it may affect not only the lungs, but each and every organ of the body; that it may affect any organ singly or every organ at the same time.

But investigation thus far threw little light upon the true question.

Then began the work of experiment. Villemin, of France, inoculated rabbits with tuberculous matter, and, gaining positive

results, is regarded as the first who placed tuberculosis in the category of infectious diseases.† But it was soon found that other and innocuous substances injected into rabbits and guinea-pigs gave similar results. Then came Waldenburg with a most important discovery,—namely, that finely-powdered innocuous substances especially gave rise to tuberculosis in the rabbit. In experimenting on animals it was found that it made a great difference what kind of animal was used; that rabbits or guinea-pigs were rendered tuberculous by simply exciting a suppurative inflammation in them without the introduction of foreign bodies, while in other animals, dog or cat, under certain conditions no amount of irritation or inoculation could produce tuberculosis. From this it is evident that the element of predisposition enters into the question; and there can be no doubt but that among human beings some persons are more predisposed than others. This idea has of late been much discussed, and Dr. Formad, having carried on a great number of experiments on different subjects during a succession of years, has made the observation that certain kinds of animals respond to traumatism and inoculations more quickly than others,—that some are but little disturbed by violent attacks upon their natures, while others succumb to the slightest interference. He has also made the observation that animals kept in close confinement and fed on innutritious diet could be rendered sensitive. Upon these observations, he divides animals into two groups,—scrofulous and non-scrofulous,—analogous to similar conditions in the human being.‡ This will be referred to later.

Cohnheim and Fraenkel (quoted after Spina‡) also made an extensive series of experiments in Berlin, in 1869, similar to those of Waldenburg. Inoculating animals in the peritoneum with tuberculous and with innocuous material, and succeeding in producing tubercles in both cases, they declared themselves against the theory holding tuberculosis as an infectious disease. Later these gentlemen repeated their experiments in another city,—also changing the point of inoculation from the peritoneum to the anterior chamber of the eye. This time they declared that they produced tubercles with the inoculation of tuberculous matter only. Thus they changed their opinions,

* Friedländer, *Virch. Arch.*, Bd. ix., 1874; also Griffin's *Med. Centralblatt*, 1875.

† Cornil and Ranvier (1880, p. 112) hint at this.

‡ Spina, *Studien über Tuberculose*, Wien, 1883.

and regarded tuberculosis as infectious. Cohnheim explains the fact that the animals inoculated with innocuous matter in the peritoneum died of tuberculosis in Berlin, not on account of the inoculation, but on account of being infected by other tuberculous animals in the Pathological Institute. Yet how does he know or can he prove that? The explanation is as unwarrantable as it is unscientific. Can he point to a single case on record where an animal, without being injured or inoculated, died of tuberculosis simply from cohabitation with other animals that were inoculated with tuberculous matter?

Then, again, his experiments on the eye are unreliable,* as Hänsell inoculated rabbits in the anterior chamber of the eye with pus from syphilitic gumma, and produced tubercles of iris, lung, and liver. This was confirmed by Spina.

Buhl,† in an extensive series of experiments, always finding tuberculosis associated with inflammation of cheesy or purulent character, set up the theory that tuberculosis was an auto-infectious disease, caused by absorption of cheesy matter.

Niemeyer gave a practical interpretation to the experiments of Buhl. He considered tuberculosis *per se* not hereditary, but secondary to chronic inflammations. The diathesis in which inflammations assume a chronic low grade he considered as hereditary. Yet experiment showed that tubercles could be produced primarily.

Dr. Foulis (*Glasgow Med. Jour.*, 1875) injected powdered cork and cinnabar into the peritoneum of guinea-pigs, and produced tuberculosis. Waldenburg, quoted above, also produced tuberculosis by injecting indifferent innocuous substances into animals. Orlando Robinson (Inaugural Thesis, University of Pennsylvania, 1881) did the same, and had similar results. Bernhard (quoted after Spina, p. 53) inoculated rabbits with tuberculous matter, and not seldom had negative results. I can quote any number of experimenters who inoculated with innocuous material and had positive results.

Within the past few years much attention has been devoted to the experiments in which animals are made to inhale atmospheres charged with foreign elements, and it has been found that inhalations of sputum

from phthisical patients produced tubercles in the lungs of the animals.

Yet Knauff (quoted after Spina, p. 57) obtained the same results by having the animals inhale coal-dust; Inis (quoted after Spina, p. 57), by using stone-dust and lamp-black. This agrees well with the discovery of Waldenburg, that finely-powdered substances especially give rise to the formation of tubercle. Klebs (*Prag. Med. Wochenschrift*, Nos. 42, 43, 1877) was the first to announce that tuberculosis was caused by the presence of a bacterium, to which he gave the name *monas tuberculosis*. But the work was in no way thorough, and attracted little attention. Robert Koch (*Berlin. Klin. Wochenschrift*, No. 15, 1882) was the first to excite the attention of the medical world by the discovery of a bacterium which he claims acts in tuberculosis as the causative agent, and to which he gave the name *bacillus tuberculosis*. The bacillus differs from the *monas tuberculosis* of Klebs, in that it is slender and rod-like, while the latter is round.

Koch claims that the *bacillus tuberculosis* is always present in tubercles, and often in the sputum of tuberculous patients; that the bacillus can be cultivated in sterilized blood-gelatin, and that animals inoculated with the product of these cultures become tuberculous, and in the tubercles the bacillus is found; that the bacillus is found in tubercles of tuberculous monkeys and chickens, and in the lesions of pearl-disease of cattle, from which he concludes that these diseases are identical with tuberculosis of man.

He also claims that the bacilli give a peculiar reaction when subjected to a particular method of staining.

Spina‡ claims to have gone very carefully over the work of Koch, and says that the staining-reaction is not peculiar to the tubercle bacilli, but that the bacilli, as well as all other known cells of the animal and vegetable world, after being stained blue can be decolorized and stained brown by vesuvin. This was first pointed out by Dr. Formad, in a lecture on this subject before the Philadelphia County Medical Society, October 18, 1882.

Spina (Experiment 26) also maintains that staining sections of tubercle according to Koch's method produced blue rods; then staining the same sections according

* Quoted after Spina, p. 50.

† *Zeitschrift für Ration. Med.*, 1857.

‡ *Studien über Tuberculose*, Wien, 1883.

to the method of Ehrlich produced other rods two-thirds shorter.

Thus, he thinks that the bacilli produced by both these methods are not the same,—at least not morphologically.

Furthermore, he claims to have found the bacillus of Koch in other than tuberculous lesions,—in croupous pneumonia, in bronchiectasia, and in pus from a trauma on a rabbit's ear.

The final conclusion of Spina is that the bacilli are not constantly present in tubercles, and are never present in tubercles of serous membranes.

Spina's work gave negative results; and, as the methods employed by this gentleman do not correspond with those of Koch, it is not surprising that his results should be different. The fact that he found no bacilli in tubercles of serous membranes does not exclude the possibility of there still being some present. The question is not in regard to their presence, but in regard to the meaning or purpose of their presence. That they are uniformly present in the lungs of tuberculous patients is, it seems to me, well enough established. But the relation they bear to the lesions of tuberculosis, that is the disputed point. Are they the cause or the concomitant? That is the question awaiting an answer.

All experimental investigation thus far carried on with a view of establishing the infectiousness of tuberculosis has failed. The results of the experiments are contradictory, and, so far as we now know, in accordance with no general laws or system. Dr. Belfield, referring to this subject in a lecture printed in the *Medical Record* for March 10, 1883, says, "The supreme question before that portion of the medical world including Virchow, Cohnheim, Billroth, Bamberger, and others, is not whether tuberculosis is infectious, but whether the bacillus of Koch is the infective agent." That Prof. Virchow accepts tuberculosis as infectious is something new, and he must have changed his mind—which I doubt—since last summer, when I heard him lecture.

I heard Prof. Stricker, of Vienna, in a lecture on this subject, last February, speak in very decided terms against the infectiousness of tuberculosis as being established. I am yet to hear that Recklinghausen of Strasburg, Rindfleisch of Würzburg, or the French pathologists Cornil and Ranvier, accept this as a settled fact.

Dr. Belfield says also that tuberculosis

is produced by inhalation of tuberculous sputum, and by nothing else, and by the introduction of minute particles of tuberculous matter, and nothing else, in the eye.

But the experiments of Knauff and Inis with coal-dust, lamp-black, etc., and the experiment of Hänsell (above quoted) with syphilitic pus, show that this is all a mistake.

Some, however, contend that tubercles produced by other than tuberculous matter are not the genuine tubercles. Yet macroscopically and microscopically they are, so far as histologists now know, identical. What better criterion than the anatomy have we at present to classify objects and prove their identity or non-identity? Thus, if a bit of finely-powdered glass produce anatomically the same pathological condition as a bit of tuberculous material, we cannot conclude that the effect is the result of an infectious cause.

We may draw the closest analogies between the clinical histories of tuberculosis and other infectious diseases, and the results will be more of interest than proof. Analogy, at best, is a poor mode of reasoning, and cannot stand against facts established by experiment.

Therefore, if the discovery of Koch be confirmed, it will settle two questions at once,—i.e., the infectious nature of tuberculosis, and the nature of the infection.

It may be urged that as in an epidemic of smallpox or diphtheria some individuals seem to possess an immunity, while others contract the disease readily, the same holds true in tuberculosis,—e.g., the bacillus finds suitable conditions for its development only in such individuals as are predisposed. Yet we know absolutely nothing respecting the cause of smallpox or diphtheria, and we can with equal justice assume that such individuals who escape in an epidemic do not become infected.

In the Middle Ages, when syphilis spread with such ravages over Europe, there were doubtless many persons who did not contract the disease; and in modern times, under the light of our knowledge of this disease, we know just wherein such immunity existed.

If tuberculosis be an infectious disease, especially if it be caused by the *bacillus tuberculosis*, the disease must follow its inoculation on man or animals with the constancy of a physical law. Syphilis, though it seems to be confined to the

human race, has no predisposing element which favors or disfavors any inoculation with the syphilitic contagion. All mortals are on the same footing, all alike subject to consequences that are sure to follow every infection.

It is natural to think that, as the tuberculous lung is the seat of the breaking down of tissue with a large surface exposed to the air, these minute parasitic particles, coming from without and finding a suitable soil, continue to live and develop in this scene of degeneration. On account of the structure of the lung, surely, no one can tell, from a microscopic examination of a section of tuberculous lung, whether the bacilli present come from the atmospheric side of the alveolus, or arise in the tubercle.

It is probable that they do come from the atmosphere, but do not find in all individuals proper conditions for development. It is also a fact that Koch did not always succeed in producing tuberculosis with bacilli from cultures. This again brings in the element of predisposition, which, it seems to me, is a great objection to holding the bacilli as the cause.

This element of predisposition has lately received some anatomical support through the labors of Dr. H. F. Formad. This gentleman, in a recent investigation on the etiology of tuberculosis, has shown that the lymph-spaces of scrofulous animals are fewer and narrower than in healthy animals, and, besides, that they are crowded with small cells. This same condition Dr. Formad holds to exist in regard to the lymphatics of human beings. This observation, by the way, has been favorably regarded by histologists abroad. These narrow lymph-spaces may have some relation to the discovery of Waldenburg, given above, that finely-powdered substances especially give rise to tubercles, by first blocking up these lymph-spaces.

But the interpretation of these observations and their relation to the etiology of tuberculosis are not yet clear.

Notwithstanding all that may be brought forward, it must be admitted that Koch has found in the sputum and in the cavernous excavations of tuberculous lungs something very important; but the true explanation of the discovery lies still in the future.

At present the views of Koch are received by some able clinicians, but not one of the leading pathologists of Europe indorses

them; on the contrary, I have heard several even ridicule them.

In Europe Dr. Robert Koch is regarded neither as a pathologist, a mycologist, nor an histologist, but as a man having great practical talent for experimental work and characterized for his sharpness of observation. Thus far only two experimenters have gone over his work, and both have failed to confirm it: so that the whole question relating to the etiology and nature of tuberculosis is still an open one.

1336 SPRUCE STREET, PHILADELPHIA.

TRANSLATIONS.

THE EFFECTS OF TANNATE OF SODIUM IN CHRONIC NEPHRITIS.—Lewins's recommendation of the tannate of sodium for the reduction of albuminuria in chronic renal disease, although apparently sustained by the physiological experiments made by Ribbert, recently failed in a trial of it in Dr. Mosler's clinic, the results being reported by Dr. E. Briese (*Deutsches Archiv für Klin. Med.*, May, 1883). In four cases, in which daily estimation of the percentage and total excretion of albumen were carefully recorded, the sodium tannate was used (a two-per-cent. solution of tannic acid neutralized with bicarbonate of sodium), a tablespoonful being given every two hours. The remedy was not equally well borne by the patients: some could take it continuously for a month, while others had gastro-intestinal disturbances within a few days, and in others every increase of dose produced vomiting. These observations were restricted to chronic nephritis; but in the four cases observed the daily excretion of albumen was not diminished, and the nephritis steadily pursued its course; the patient's general health suffered, extensive oedema appeared, and symptoms of uræmia completed the clinical picture, in spite of the continuous administration of the remedy.

TREATMENT OF APOPLEXY.—In a recent discussion upon venesection in apoplexy, before the Société de Thérapeutique, Dujardin-Beaumetz opposed bleeding. He said that in apoplexy there is ordinarily a cerebral congestion, or a hemorrhage, or an anæmia: in the last two cases, which it is almost impossible to distinguish clinically from the other, resulting as they do from

vascular lesions, bleeding should not be employed. Venesection to suspend a hemorrhage, logically, should be pushed to syncope; without this it is useless. In anæmia it is irrational, and, moreover, would have no influence upon the vascular lesions and arterial obstruction which are the efficient cause of the cerebral disorder of circulation. The utility of bleeding even in cerebral congestion, or the "rush of blood" of older writers, is, to say the least, disputable, while in anæmia and hemorrhage it is dangerous and useless. Whenever a hemiplegia persists, no matter how slightly, for twenty-four hours, we may rest assured that it is not simply due to cerebral congestion, but to a hemorrhage or local anæmia.—*Revue de Thérapeutique*.

ICHTHYOL.—Unna (*Deutsche Medicinal Zeitung*, No. 17) considers that in ichthyol (a mineral containing ten per cent. of sulphur) we have an agent for the local treatment of acute and chronic joint-affections of a rheumatic character, more useful than any similar agent: it is an anti-rheumatic remedy of the first rank. In skin diseases it has also been employed with success. For local use a ten to fifty per cent. combination with petrolatum has been used with much satisfaction in stiff and painful rheumatic joints, and it proves a useful addition to the salicylic acid treatment. It may be also used as a solution or a spray in muscular rheumatism, catarrh, and laryngeal phthisis.

R Ichthyoli puri, 10;
Ol. ricini, 20;
Spiritus, 100.

M.

or

R Ichthyoli, 5;
Ætheris, spiritus, ana 50.)

Occasionally superficial inflammation of the skin is caused by the remedy (sudamina, miliaria rubra), or an artificial dysidrosis; but this need not interfere with the treatment. Warm baths and internal medication by salicylic acid are not to be neglected. These local applications have also given great relief in gout.

CORROSIVE SUBLIMATE IN THE TREATMENT OF DIPHTHERIA.—Kaulich (*Bull. de la Soc. de Méd. de Gand*) has used in a number of cases corrosive sublimate, both locally and internally, in the treatment of diphtheria. He treats the exudation in the nose, the mouth, and the throat by appli-

cations of a solution of 1 in 2000. Among cases of infants that have had tracheotomy performed, the trachea is painted with the same solution four times daily, or even every two hours. Inhalations were likewise ordered of .005 in 1000 fifteen minutes at a time, repeated every hour or less frequently, according to the case. Internally, he gives to children one or two centigrammes (gr. $\frac{1}{10}$) daily in albumenized water containing a little cognac and sugar. Warm applications to the outside of the throat are likewise made.—*Bull. Gén. de Thérapeutique*, April 15.

UROSEIN—A NEW COLORING-MATTER IN THE URINE.—Neucki and Lieber (*Journal für Prakt. Chemie*, N. F., xxvi.) have found in the urine of a diabetic, as well as in other pathological urines, a coloring-matter which in its chemical characters resembles rosaniline. In order to detect its presence, 100 c.cm. of urine with 10 c.cm. of a twenty-five-per-cent. solution of sulphuric or hydrochloric acid are mixed in a test-tube and shaken gently with amyl alcohol; the urosein, if present, will give a rose-color to the alcohol and urine. It gives a characteristic absorption-band (between D and E) in the spectroscopic.

PROLONGED ANÆSTHESIA BY NITROUS OXIDE.—M. Bert recommends the following method of obtaining insensibility by nitrous oxide for surgical purposes. The pure nitrous oxide is to be inhaled for one minute; then a mixture is to be substituted of oxygen (twenty per cent.) and nitrous oxide (eighty per cent.) for five minutes; when this is to be followed for one minute by the pure gas, and again by the mixture, —this being repeated as long as it may be considered desirable.—*Proc. Soc. de Biologie; Le Progrès Médical*.

HYDROCELE CURED BY ERGOT.—An injection of two drachms of fluid extract of ergot, in mistake for iodine, into the sac of a hydrocele, produced no inflammatory reaction, and no pain, and the hydrocele did not return. Subsequently two other cases were treated successfully in the same way by Dr. Walker.—*La France Médicale*.

HYSTERICAL CONTRACTURE AND PARALYSIS.—Huchard entirely relieved a hysterical contracture of the forearm by the application of an elastic bandage.—*Revue de Thérapeutique*.

PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JUNE 16, 1883.

EDITORIAL.

THE MEDICAL SOCIETIES.

THE annual epidemic of meetings of medical societies in which our readers are interested has just closed, and in order to complete the records of its ravages we have slightly delayed this issue of the *Times* so as to present them in full.

Everywhere good-fellowship has been encouraged and strength given to the bonds which ought to unite all capable and honest practitioners. As a scientific body the National Surgical Association has been most successful and laudable in its efforts: perhaps we should say it has achieved practical artistic rather than scientific success, for art in surgery, and pre-eminently in American surgery, is more than science. How few surgeons are scientists, and how few doctors are artists! It is a surgeon that wields the most skilful of modern etching-needles; it is a surgeon noted for his urethral lore who is the first amateur painter of Great Britain; and if in Vienna a great picture is to be criticised or a doubtful identity determined, to whom do men turn except to Billroth, *facile princeps* alike in surgery and in art criticism?

When scientific work is required, it is the doctor that is called. On whose brows among us do scientific laurels rest, if not upon those of Dr. S. Weir Mitchell? No surgeon has ever been elected into the National Academy of Science,—that body which in theory, and, to a great extent, in actuality, represents the best scientific talent of the country.

But we are wandering from our subject,—wandering, however, with the aimless freedom of holiday, amusing our-

selves because there is very little left for us to say, so well and so thoroughly has our reporter done his work. We cannot, however, close without a word of praise for the dexterity which was shown at the American Medical Association in so strangling all ethical rebels that none of them succeeded in crossing the sacred Æsculapian threshold, and the shades of Hippocrates suffered no dishonor, no distress over unseemly bickerings and disputings.

LEADING ARTICLES.

MIDZU AMI, OR JAPANESE EXTRACT OF RICE.

THIS is a nearly colorless, or slightly yellowish, transparent, tough, jelly-like substance, of a sweet taste, and very delicate, pleasant flavor. The following letter was written to Dr. S. Weir Mitchell, in answer to inquiries, by Dr. J. C. Berry, of Okayama, Japan:

OKAYAMA, JAPAN, March 30, 1883.

MY VERY DEAR SIR,—Your note of inquiry concerning *midzu ami*—"what it is, and how it is made"—was duly received, and I deeply regret that I have been prevented from replying thereto until the present time. I could have told you *what it is* at once; but *how it is made* was not so familiar to me; and it has been the acquisition of this information that has caused the delay in writing. During the last three or four years there has sprung up quite a demand for *midzu ami*, so that manufacturers have been vying with each other to produce a superior article; and any inquiries as to its manufacture have always been treated with such evasiveness as to lead me to question if my inquiries were truthfully answered. There was one man acquainted with its manufacture, however, whom I knew I could trust and who would be glad to answer my questions. Unfortunately, he has been away from home much of the winter, and on his return was sick for some time. From him I now learn as follows:

"To make Midzu Ami.

"1st. Malt (*moyashi*). This is made by putting barley into a pail with a perforated bottom, and moistening with water for two weeks, by which time (varying with the weather) the barley germinates. Then spread and dry, after which rub off the sprouts, winnow, and grind, when it is ready for use.

"2d. Take of *mochi gome* [a very glutinous rice, from which *mochi*, a kind of bread, is

made by simply cooking the rice and then pounding in a mortar] one *to* [a *to* is one quart, one pint, and half a gill, imperial measure]. Cook the rice by steaming in a wooden box until moderately soft. Remove to a pail, and add—malt 450 *momrue* [100 *momrue* = 1 lb. Troy], and five *sho* of water [$\frac{1}{2}$ *to*]. Then with the hands thoroughly mix the whole, squeezing and crushing the rice until it assumes a hard jelly-like consistence. Then allow to remain for twelve hours, during which time stir three times. (If the weather is very cold, cover with straw mats; if too warm, keep in a very cool place.) Remove, and place in hempen bags, put into a strong box, and press out the liquid with firm pressure. Then put into a pot and evaporate to proper consistence over a slow fire."

I would add that this *mochi gome* is much richer in gluten than the rice habitually used by the people, though this latter is much richer in gluten, and has less starch, I am told, than the Chinese rice. I am now having some tin boxes made, to send samples of tea, seeds, etc., to friends by mail, and on their completion will send you a box of *mochi gome* for analysis, if you care to take the trouble. The barley is very like our home barley, and possesses nothing peculiar. It is only used as malt. You will notice that there is about ten times the amount of rice (*mochi gome*) that there is of barley.

I use the *midzu ami* in my practice in all cases where food-medicines are required, and frequently prescribe it with dialyzed iron, or with cod-liver oil, after being properly diluted. It has always been regarded by the Japanese as an article of diet, and not until recently has it been used as a medicine; and even now this is confined to the foreign physicians in Japan, or to the young Japanese physicians educated by foreigners. I use it on my table as an article of diet, instead of syrup or honey, especially with one of our children who has a weak stomach; and with it even I can eat hot buckwheats in the morning! I imagine that its one single advantage over "malt" or "maltine" is its more easy digestibility; but this you will be able to judge of better than I.

YELLOW FEVER IN BRAZIL.

BY order of the Brazilian government, the Professor of Organic Chemistry of the Faculty of Medicine of Rio de Janeiro, Dr. Domingos Freire, is continuing the work begun in 1880 upon the cause, nature, and treatment of yellow fever, especially in regard to the existence of any peculiar microbes, their cultures, and the effects of attenuation and of antizymotic remedies upon them.

To three students a monthly stipend of reis 120,000 (about sixty dollars) is allowed, to aid in these studies in the maritime hospital of Santa Isabel.

As a primary result of his studies, Prof. Freire has sent a communication to the *Journal Officiel de l'Empire de Brésil* (May 8, 1883), in which he states that he took in the cemetery Jurujuba, where the deceased persons from the maritime hospital of Santa Isabel are buried, a little of the soil from beneath the grave of an individual who died of yellow fever one year ago. In its aspect, odor, and other external characters, this soil presented nothing abnormal. But microscopical examination with a power of seven hundred and forty diameters revealed the presence of myriads of microbes absolutely identical with those in the black vomit, in the urine, blood, and other organic liquids, of patients seized with yellow fever,—that is to say, cells of *Cryptococcus xanthogenicus* in different stages of development.

A great number of these organisms executed spontaneous movements. Yellowish masses, protruding from the pigmentary substance of the cells, full of granulations, and some other black particles, débris of *Cryptococci*, were also seen. Finally, there were observed vibriones moving with rapidity.

These observations, which have been verified by MM. Chapot, Augusto Cesar, and Caminhua, clearly show, says Prof. Freire, that the germs of yellow fever perpetuate themselves in the cemeteries, which are equally *pépinières*, where new generations, destined to devastate our city, are elaborated. After passing through the porosities of the earth, these germs disperse themselves in the atmosphere; others are carried by the torrential rains to the streets and squares, and, finding there a centre favorable to their evolution, they provoke the invasions of the epidemics in the summer, the season most propitious for their proliferation.

The presence of the *microbes* of yellow fever in the cemeteries corroborates in every way the observations of Pasteur made relatively to the *microbes* of malignant pustule.

To prevent the spread of yellow fever, the professor proposes cremation of all persons who die of the disease.

F. P. NOVAES.

NOTES FROM SPECIAL CORRESPONDENTS.

CINCINNATI.

PURPURA HÆMORRHAGICA was diagnosed as the cause of death in two cases where subsequent revelations point to the deadly *purpura variolosa*. It is so unusual to confound these two diseases that none of our books call attention to the differential diagnosis.

The first case happened in the Cincinnati Conservatory of Music, an institution where young ladies receive musical education and boarding in the same building. The attending physician, Dr. B. F. Miller, is a gentleman standing high in the profession, having at one time been surgeon to the Cincinnati Hospital. His consultants were Dr. J. P. Walker, formerly physician to the Smallpox Hospital, and Dr. Comegys, now on the staff of the Cincinnati Hospital. These eminently qualified practitioners decided that the case was one of *purpura hæmorrhagica*, and that *pyæmia* was the immediate cause of death, and so signed the death-certificate. The body was removed to Robinson, Illinois, and there interred. Subsequently smallpox developed in the Conservatory of Music and at Robinson, Illinois, and several deaths resulted. The attending physicians state that there were no papules, vesicles, or pustules anywhere on the body during the whole course of the disease. There were free hemorrhages from all the mucous membranes, and purpuric extravasations all over the body.

The press of the city and some ignorant doctors had a great deal to say about the attending physicians, but the body of the profession stood up to them nobly,—two of the most eminent physicians in the city coming out in a card expressive of their sympathy, and recounting a similar mistake in their own practice some years ago.

Hardly had the talk about this case ceased, when Dr. De Courcy, a physician of large practice in the West End, signed *purpura hæmorrhagica* as the cause of death of one of his patients. The Health Officer was suspicious of the case, and had the coroner order a post-mortem. Dr. E. W. Walker, Pathologist to the Cincinnati Hospital, performed the necropsy, and stated that *purpura variolosa* was the *casus morbi*. He stated that he found several distinctly umbilicated pustules. Dr. De Courcy has come out in a card, which has been replied to by Coroner Muscroft, and still they are not satisfied.

Cincinnati Board of Health.—The Superior Court refused to appoint a Health Commissioner, and the courts have decided that the present Board of Health is done away with: so that now we have no Health Department to our city government. Steps are being taken to force the Superior Court to carry out

the law, and until that is done we will enjoy an interregnum.

Quacks.—A bill was recently introduced in City Council to provide for a wholesale purging of the medical profession of our city. It is hoped that the city may be freed from the host of quacks who now flaunt their brazen advertisements in our most public streets. One man has the effrontery to advertise to "remove all obstructions to menstruation, from any cause," and doubtless has plenty of the work to do.

Trephining the Thorax.—In the Cincinnati Hospital, lately, your correspondent was present, by invitation, to witness the trephining of the thorax for empyæma by Dr. N. P. Dandridge, Surgeon to the Hospital. Dr. D. took a button from the seventh rib of the left side, and then enlarged the opening with the bone forceps. A silver tube for permanent drainage was inserted. The whole operation was performed under the spray, and the wound dressed *à la* Lister. Dr. Dandridge carries out the minutiae of the Lister dressing perhaps more completely than any other surgeon in the city, and his results are, as a rule, excellent.

He showed me a case, in the same ward, of an incised wound of the tongue, from which the hemorrhage had been obstinate. To control it, he first ligated the lingual artery and subsequently the external carotid. Even then there was some hemorrhage, and a ligature had to be thrown around the tongue before it entirely stopped.

A. B. T.

June 11, 1883.

CHICAGO.

ON the first of the month the Illinois Training-School for Nurses celebrated a double event,—the graduation of its first class, and the opening of the new home in connection with the school. The school was established nearly two years ago, and is now considered a success. The graduates numbered six, and there are twenty-seven under instruction. Those admitted to the school are required to place themselves under one month's probation: if at the end of that time they are considered suitable persons, they are admitted to a regular course of instruction covering two years. The new home is a substantial four-story-and-basement brick building, affording accommodation for about fifty nurses. The building was erected by public subscription, and has been paid for so far as it has gone. The intention is to increase its size by additions which have been kept in view in the plans. The examining board on the occasion of this commencement was composed of regular and homœopathic physicians.

There is renewed agitation over the disposition of our unclaimed dead, and a very shocking state of affairs has been shown to

exist. The county undertaker is charged with collecting pay from the county for the burial of bodies which he had shipped to various points for dissection, some going to Keokuk, Iowa, Ann Arbor, Mich., and St. Paul, Minn. From these markets the undertaker is said to have received as high as fifty dollars for a subject, while our local schools were left short of material. The grand jury has indicted the undertaker, but that worthy is now sojourning in Bermuda for his health: his offence is punishable with one thousand dollars fine or one year's imprisonment.

Our State Board of Health has been in receipt of the usual amount of interesting correspondence, the last being a postal card from the indignant "President" of the St. Louis Eclectic Medical College, in which he styles the Board "dastard bigots and villains" because that body declined to recognize certain of its graduates. The Board is about to give its attention to an eclectic of this city who has lately published and distributed a curious pamphlet full of crazy assertions and abuse against the Board and the practice of vaccination. The document is one likely to work harm among the ignorant.

The delegates from this city to the American Medical Association will number more than for several years past.

The health of Chicago during the past month has been exceptionally good.

June 5, 1883.

PROCEEDINGS OF SOCIETIES.

NEW JERSEY STATE MEDICAL SOCIETY.

THE one-hundred-and-seventeenth annual meeting of the Medical Society of New Jersey—the oldest chartered medical society in this country—was held at Atlantic City, June 12 and 13. By the courtesy of the West Jersey Railroad Company, a special train left Camden at noon on Tuesday, June 12, with over two hundred delegates and guests from Camden, Philadelphia, and the neighborhood. The sessions were held at Congress Hall. John W. Snowden, M.D., of Waterford, New Jersey, President of the Society, occupied the chair. An unusually large gathering of members and visitors was noticed, the weather being most favorable for attendance.

The State Medical Society met here last in 1875. Since that period Atlantic City has doubled in population, and more than trebled in importance as a sanitary and summer resort, according to Dr. Boardman Reed, who in his address of welcome gives the following interesting facts with regard to this valued health-resort:

"Among the recent improvements in the place are two new railroads from Philadelphia, gas-works, electric lights, a permanent ocean pier, a large number of new hotels, boarding-

houses, and cottages, including some of rare architectural beauty, and, more important than all else, very complete, if rather expensive, water-works, insuring an inexhaustible supply of pure water at all seasons from springs upon the mainland. A Board of Health, with ample powers and the determination to exert them to the fullest extent necessary, has been organized under the recent sanitary laws. I crave your indulgence for a passing allusion to the work this Board has done and is doing. A competent medical gentleman has been appointed health inspector, and is devoting his whole time to the highly-important practical work of making house-to-house inspections and investigating alleged nuisances. All garbage is gathered and removed daily from every house in tightly-covered barrels, and is conveyed miles away from the city. Vaults and cess-pools are required to be cleaned much more frequently than formerly, and must be so maintained at all times as not to be offensive. Arrangements are now making to put in at an early day an improved system of sewerage. Two different drainage companies, with ample capital, have submitted for the approval of the Board detailed plans which contemplate the use of powerful pumping apparatus, small straight pipes, and some chemical process for converting the solid parts of the sewage into fertilizers, allowing only the purified liquid portion to be emptied into the surrounding waters. Whichever of these companies can afford the strongest guarantees that it will carry out such a plan efficiently and in good faith will probably be approved, and there will then be assured to Atlantic City the most perfect system of sewerage possessed by any city on the Atlantic coast."

An address of welcome was also delivered by Hon. Charles Maxwell, Mayor of Atlantic City.

Dr. H. G. Taylor, of Camden, the chairman of the Committee of Arrangements, presented the programme for the sessions, and invited the Society to attend a banquet and reception given in its honor by the physicians, citizens, and residents of Atlantic City, on Tuesday evening. An excursion for Wednesday was announced to South Atlantic, to view the curious construction of a building the shape of an elephant. A yacht-excursion, a visit to the light-house tower, and a review and exhibition drill by the Government Life-Saving Service were also announced.

The report of Dr. A. B. Watson, chairman of the delegation to the American Medical Association, was received, and the reference to the course pursued by the Judicial Council to prevent the agitation of the Code question, and the announcement of the election of Dr. Austin Flint, of New York, to the chief office, excited much applause. The report was ordered for publication.

The Standing Committee, Dr. C. J. Kipp,

chairman, read the report from the various counties with regard to prevailing and epidemic diseases during the past year. Malarial fevers, smallpox, and bowel-disorders had existed to a less extent than before, but pneumonia, catarrhal affections, diphtheria, scarlatina, and measles were, in some of the different sections, slightly more prevalent than usual. Clinical notes of several cases by individuals accompanied the report and were read by title. Literary publications were also announced by members of this Society.

The Society for the Relief of Widows and Orphans of Medical Men in New Jersey, having been organized about one year ago, is now in operation in Newark.

Dr. J. D. Osborne, of Newark, President of the Widows' and Orphans' Aid Society, made a vigorous and earnest appeal in behalf of this young but deserving benevolent Association.

A list of deaths during the year was read by the Secretary. The report was adopted and ordered to be printed.

Dr. Hunt, of Metuchen, offered the following resolution, which led to some discussion: "Whereas, The American Medical Association has at its late meeting made new requisition of delegates before their names were allowed to be enrolled:

"Resolved, That in nominating delegates to that body the Nominating Committee be requested to confer with our Committee on Ethics, and, if they think necessary, with this Society, as to the propriety of this course, and what action needs to be taken in reference thereto."

After considerable discussion, and an explanation by Dr. William B. Atkinson, Permanent Secretary of the American Medical Association, that this was not a new requirement but merely a revival of one formerly in force by which every delegate was obliged to subscribe to the Constitution, By-Laws, and Code of Ethics of the Association, the motion of Dr. Hunt was lost by a decisive vote, after a motion to lay on the table had been voted down.

At the evening session at 7.30 o'clock Dr. John W. Snowden delivered his annual address on "*The Advances made in Medicine by Physical Diagnosis*." Beginning with that early stage in the history of medicine when physical diagnosis was unknown, he traced its use and development down to the present day. Hippocrates was the first to make use of it, and styled it "succussion." The doctor referred first to the means of diagnosis of diseases of the chest,—percussion. The discovery of thoracic percussion, he said, is due to Avenbrugger, whose labors in behalf of his discovery were not fully recognized even at the time of his death. It was neglected by the physicians of that time,—set aside as unworthy of consideration.

It is to Piorry and Skoda, however, that

the most important advances in the practice of percussion are due. Before them percussion was practised with the fingers only, and it was for Piorry to introduce the use of the pleximeter. The knowledge of some of the phenomena of auscultation dates from the time of Hippocrates. He was also undoubtedly acquainted with the friction-sound of pleurisy and many of the catarrhal sounds. The real discoverer of auscultation, however, is Laennec, who died in 1826. The first stethoscope which he used was a roll of paper which he happened to have in his hand, and three years' further study made him acquainted with all the fundamental facts of the science.

The different means of physical diagnosis in use were then discussed in turn,—the spirometer, the manometer, the use of the tuning-fork, the stethometer, the cyrtometer, and many others. He referred to the great help of the thermometer, and latterly of the electric light and the gastroscope, with which the physician of to-day can examine the interior of the stomach in any living subject, when only a few years ago an accidental wound in the abdomen furnished the only opportunity for an examination of this organ in man.

After the address had been read, a committee on "Where and of Whom Reliable Vaccine Virus may be Obtained," H. H. James, chairman, reported complete inability to furnish the desired information, and suggested that the supply of bovine virus should be under the control of the State government, in order to prevent vaccine virus being subject to commercial speculation.

After adjournment, a grand hop and banquet, given by the citizens of Atlantic City, were held at Congress Hall.

On Wednesday morning the meeting was called to order at 9.30 o'clock. The committee on the Treasurer's accounts made a provisional report, and, on motion, it was directed that the Treasurer be required to give a bond of \$5000.

The committee appointed to examine into the qualifications of an applicant for the degree of Doctor in Medicine, in accordance with the By-Laws, recommended Mr. P. N. Jacobus for the degree, which was conferred by motion of the Society.

The following names were proposed for honorary membership, Drs. Thomas Addis Emmet and Isaac E. Taylor, of New York, and unanimously elected.

The Committee on Prize Essay reported that no essay had been submitted for the prize.

Dr. Hunt offered a series of resolutions calling the attention of Congress to the needs of the Army Museum and Library of the Surgeon-General's Office at Washington, both for its support and preservation, requiring an annual appropriation and a fire-proof building, and petitioning the national Legislature to supply these needs. This motion was unanimously adopted.

Dr. Joseph Parrish read a paper on "*Some Problems in Insanity*." He said that in all large asylums there is a large class of harmless insane, known as chronic incurables, who are considered beyond the resources of medicine. He insisted that no line can be drawn between the acute and chronic, nor can the curable and incurable be thus differentiated. He cited an instance of a lady at 70 years of age, who was able to return to her home cured, and able to take care of herself, after twenty-eight years of insanity. Very many so-called chronic cases are curable, if we know how to go about it. He urged the appointment of a lunacy commission, clothed with sufficient authority to examine every place where an insane patient may be confined. He called attention to the disgraceful treatment of such patients in county poor-houses and similar places, and asked for the removal of the harmless ones for treatment on trial. If this should be done, there are enough accommodations in the existing hospitals for the insane in this State to accommodate all the violent cases and those requiring confinement, as well as cells for the criminal insane. He directed public attention to the condition of the insane in the various poor-houses, and called for enlightened legislation upon the subject.

Dr. Parrish offered a resolution, that a committee of the State Society be appointed, with authority to confer with sub-committees of the various county societies, to report at the next meeting upon the treatment of the insane in this State, and to recommend any steps that may be advisable in the premises.

Dr. Hunt offered the following substitute:
"Whereas, The condition of the insane poor in the several county poor-houses in this State is such as to warrant the earnest attention of this Society: therefore, it is

"Resolved, That the Chair appoint a Committee on Lunacy, whose duty it shall be to inquire into the condition of the insane poor in the asylums and almshouses of the State, and report at the next session of the Society."

This was accepted and adopted.

The President appointed Drs. Parrish, Gauntt, Pierson, Oakey, and Marsh to serve.

The Nominating Committee brought in the following report:

President, Stephen Wickes.

First Vice-President, P. C. Barker.

Second Vice-President, Joseph Parrish.

Third Vice-President, C. J. Kipp.

Corresponding Secretary, William Elmer, Jr.

Recording Secretary, William Parrish.

Treasurer, W. W. L. Phillips.

Standing Committee, Samuel S. Clarke, E. J. Marsh, J. T. Smith.

Next place of meeting, Cape May; time, June, 1884.

Dr. George Bayles read an essay on Causes of Melancholia. C. J. Kipp read a voluntary communication on the Management of Cases

of Iritis. Dr. E. Mann, of Brooklyn, by invitation, read a paper on the Pathology of Inebriety.

The report of the Nominating Committee was taken up, and the officers unanimously elected by ballot.

The session adjourned at noon, after passing a vote of thanks to the citizens of Atlantic City, the authorities at the Life-Saving Station, and the railroads, for courtesies extended to and enjoyed by the Society.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

A CONVERSATIONAL meeting of the Society was held at the hall of the Society on Wednesday evening, March 28, 1883. Dr. Philip Leidy read a paper entitled "*Medical and Vital Statistics: are they Reliable?*" (see page 647).

DISCUSSION ON MEDICAL STATISTICS.

The President stated that discussion of the following points was especially invited:

The Registration Act,—its importance from a medical and legal point of view.

Carelessness in the matter of diagnosis by physicians, as evidenced by death-certificates and reports of contagious and infectious diseases: how such errors affect vital statistics.

What has been the experience of the members of the Society regarding the prevalence of diphtheria during the past fall and winter?

Dr. J. G. Richardson said he was very glad that the paper had been presented, both on account of its intrinsic importance and because it offered an opportunity to refer to the difficulty which the Board of Health has in supplying the vital statistics. Great efforts are made by the Board in this respect, but without the complete success which is so desirable. Dr. Billings has enunciated the dictum that if the reported death-rate of a large city falls below nineteen per thousand, an error exists somewhere in the statistics: either the deaths are not all reported, or the population is overrated. Several years ago, the death-rate of Philadelphia was, on one occasion, stated to be as low as seventeen and a fraction per thousand; and, although it is true that Philadelphia is a city of homes and of healthy homes, this low death-rate was probably slightly erroneous. Furthermore, it is to be observed that errors in diagnosis are frequent causes of defective statistics. In a certain county of a Western State sixty-nine deaths were returned to the health authorities, and sixty-four were actually reported to have been caused by "*sickness*." Of course such a flagrant neglect did not exist in our own city, but even here room for improvement in this respect might easily be discovered.

Dr. William T. Taylor referred to the question of the prevalence of diphtheria, which had been alluded to in the paper. During

the past three months he had seen many cases of sore throat, but had seen but five cases of diphtheria. Many cases of sore throat are, however, put down as diphtheria, especially by homœopaths. He recalled the fact that Dr. Wilson Jewell told him that during the cholera epidemic in 1854, many cases of simple diarrhœa had been reported as cholera by homœopathic physicians, because they claimed that these cases would have developed into cholera if it had not been for the homœopathic treatment.

Dr. S. Ashhurst said he had long since come to the conclusion that it was true that nothing could lie worse than figures,—except facts. The registration of deaths is important for legal reasons, and for the advantage of preventive medicine; but as indications of the relative prevalence of various diseases they are untrustworthy, except where very large numbers are considered. In the country medical men are so varied in their knowledge that no uniformity in diagnosis can be expected, and for some medical purposes, as where accuracy of comparative diagnosis is wanted, the death-statistics are worthless and will probably always remain so. As an illustration of the difficulties in regard to these matters, we may take the statistics of surgical operations. Esmarch, for instance, presented statistics which seemed to show that the antiseptic method is the *ultima Thule* of surgery, but other observers had not been able to get such uniformly favorable results.

In Philadelphia, the deaths were probably correctly reported. He was not aware that the death-rate of Philadelphia had ever fallen as low as seventeen per thousand, but if the reports indicated this rate they were probably correct. Dr. Billings's dictum to the contrary notwithstanding, as the registration of deaths and the estimation of the population in this city are pretty correct. It is the registration of births that is erroneous.

Dr. James C. Wilson referred to a paper recently published by Dr. Billings in the *American Journal of the Medical Sciences*, on the subject of vital statistics. Dr. Billings pointed out that no remedy for the present errors in these matters exists short of educating the public up to the standard of appreciating the value of correct statistics. The errors are partly from design, partly from neglect, because the community does not comprehend the importance of the results. Physicians, also, are often at fault. The education of the public must come through the instrumentality of the medical profession. Dr. Wilson does not agree with Dr. Ashhurst in regard to the absence of medical value of vital statistics. They, even when imperfectly kept, serve to indicate the approach of epidemic diseases, and, due allowances being made for their well-known faults, are not without value in forming estimates of the relation of particular diseases to local sanitary

conditions. The Board of Health in this city is not systematic in its work: strictly, the law requires that a return shall be made of all contagious diseases, but in practice the Board expects merely returns of cases of certain forms of disease, such as variola and typhus fever.

Dr. Welch called attention to the fact that an Act of Assembly required reports of *all* contagious diseases except measles. Typhoid fever was not included in the list of contagious diseases within the meaning of this law.

Dr. C. H. Thomas agreed with the views advanced in the paper. The fault was both in the incomplete collection of the statistics and in the erroneous diagnosis of the causes of death. The difficulty of diagnosis had been forcibly brought to his mind by a series of three cases which had resembled diphtheria closely in some respects. The clinical histories presented the symptom of marked patches of white exudation, involving the faucial region,—tonsils, uvula, and pharynx,—but associated with this was very slight fever or other constitutional disturbance. The three cases occurred in three separate houses, were all in adults, and but a single case appeared in each house, notwithstanding that children resided in all. He could not conclude that the disease was diphtheria, and Dr. Bruen, who saw one of the cases with him, expressed the same doubts. They all yielded to expectant treatment in a very few days. In such a disease as diphtheria, concerning which the diagnosis is often uncertain, it seems practically impossible to obtain accurate statistics of its prevalence or mortality.

Dr. Eskridge referred to two cases which he had seen during the past winter, occurring in the same family, in persons sleeping, when he first saw them, in the same bed; one, a girl, aged 17 years, had a severe and fatal attack, the other, two years younger, had diphtheria in its mildest form and recovered without an untoward symptom. From his experience with the disease, he was beginning to believe in the non-specificity of the poison of diphtheria. He had seen cases of apparently simple tonsillitis pass into true diphtheria, and he had seen some children suffer from the disease while others of the same family were affected with a non-membranous pharyngitis.

THE TEA-PLANT IN EUROPE. — *L'Union Médicale* states that the attempts at acclimation of the tea-tree in the Loire-Inférieure are getting on very well. Grafts on camellias have borne very well in the open air at a temperature below freezing. In Sicily, near Messina, one hundred and twenty plants, planted three years ago, are very vigorous, and have produced abundance of leaves and seeds. It remains to be seen whether the aroma of the leaf will be preserved.

REVIEWS AND BOOK NOTICES.

BRAIN-REST. By J. LEONARD CORNING, M.D., etc. New York, G. P. Putnam's Sons, 1883.

If we believe the alarmist, the specialist in nervous disease, the intelligent foreigner who writes us up in a few weeks of travel, our ancestors were but a sleepy people compared with ourselves. To draw general inferences, we should conclude that in Revolutionary days affairs moved very slowly. The uneasy patriots who objected to the impost on tea objected perhaps so strongly only because so dependent on the fragrant herb to rouse them from the lethargy which was universal. As the natives of Boston were the originators of the rebellion, we can see how, even as far back as that, they had some longings for mental activity. The "early to bed" of our childhood was but a traditional maxim derived from the days when Nature forbade late hours. Certainly, if since we became a nation our hurry has so increased, our power of sleep so diminished, further progress in the same direction would soon banish sleep altogether; it would become but a tradition.

But to stay this disastrous yet surely approaching time, when day will yield only to a more brilliant electrical illumination, night be abrogated, and toil be unrelenting,—when the land will be filled with rest-cures and the pharmacies sell only stimulating cordials,—is the self-appointed task of the author of "Brain-Rest."

We do not wholly accept the popular theory of the cause of American nervous disease, or believe that our intensity is so much greater, our competition so much closer, than in older lands. There is something, indeed, in method, if we would do work and still save strength; and the American mind is not methodical: rather than plod, it would assail the goal by a leap. But the world's work is well done elsewhere. There is the struggle for a livelihood, the keen competition for pre-eminence, in other lands than ours. We must look back of all this, to climatic causes, to the transplantation of the Caucasian to new fields and skies, to the signs, by no means wanting, that we are not yet acclimated in America as a race, and that it yet remains to be seen whether we will be. If in our efforts we are struggling not only against the usual odds of life, overcrowding, the desire to be early rich or famous, the numberless obstacles which life everywhere puts before men, but also against an ever-present but intangible foe pervading our cities and our country, coming in the desperate languor of our summer heats and the chilling blasts of our winters, depressing now, anon elevating and exciting, till constitution succumbs to the rapid alternation,—if there be further added the so-called "malarial poison" of new lands,

and the defective hygiene of new cities, then we may have a total, struggling against which even the Caucasian constitution may more than meet its match.

The author of "Brain-Rest," trying to discover the remedy for all this, begins with the study of sleep, evidently the best starting-point for investigation, since so-called nervous exhaustion and brain-tire show themselves prominently first in insomnia. Indeed, the question of sleep is the key to the patient's condition. Given excessive work, irritability, depression, easy exhaustion, diurnal drowsiness, just as the patient approximates still to normal sleep at night, so will be the chances of his speedy cure.

Now, sleep, the author tells us, is now proved, by the investigations of Durham, Hammond, Fleming, and himself, to be due to brain-anæmia, initiated by normal intraganglionic exhaustion. There is, "under normal circumstances," "an ebb and flow of brain-activity" in "synchronous harmony with the setting and rising of the sun." For the most of his proof he relies upon the investigations of Dr. William G. Hammond, from whose works a lengthy quotation is always readily forthcoming, and, to distinguish him from the other investigators, he is careful almost invariably to term him "the eminent observer."

Now, it will not do for an individual to sleep for a given length of time in every twenty-four hours, for his "periods of rest should invariably occur at the time indicated by nature,"—viz., "as soon after sunset as possible." Here we strike the first clue to our present national condition,—artificial light, night-work, the exigencies of modern life. The author's panacea is as follows: To sleep, all worry and vexatious circumstances must be habitually avoided, and excluded from the mind for a considerable time before the hour for retiring; it will not do to count one hundred backwards, for this requires effort. One must "exclude each and every species of mental exertion;" and then "never thwart the drowsy impulse." The position on the right side is generally best. The evening meal should have been light and digestible, and tea and coffee, while not entirely condemned, are not to be taken at night.

The author seems to consider insomnia as the cause of all the evils that follow in its wake. "These"—irritability, melancholy, brain-exhaustion, hypochondria, and insanity—"can almost always be traced to some primary disorder of the function of sleep." But insomnia is by no means the first in the series of causes, but indicates that a stage has been reached after which the downward progress is much more rapid. For to the man who can still sleep well all things are yet possible: hence the importance of restoring sleep.

Now, for the relief of this condition of insomnia, apart from moral and mental means,

the author offers mainly chloral, the bromides, and mechanical appliances. "The irritated brain-substance itself must be restored to a normal condition," by certain remedies which act on it, and by certain agents which act on the whole constitution. Here, of course, the diagnosis of anæmia from hyperæmia becomes of the first importance; and yet, after two chapters devoted to the calorimeter, Becquerel's disks, and cerebral thermometers, he says, "These beautiful appliances, owing to their cost, are not obtainable by all:" so that the diagnosis is thrown by pecuniary considerations into the hands of the happy possessors of "these beautiful appliances," and he gives us but little hope of arriving at correct conclusions without them.

In showing the methods of diminishing the cerebral circulation, the author states that medical men have always had, and always will have, doubts as to the propriety of ligating the carotids in purely functional cerebral disorders; therefore he has devoted considerable time to devising a perfectly safe method of reducing the blood-flow to the brain. This instrument he terms a "carotid truss," though a truss is something to support or retain, and the "carotid truss" is obviously for a different purpose. It has both a coarse and a fine adjustment, but is difficult to apply to the necks of fleshy persons; and these fleshy persons, as the author derisively calls them, do not bear pressure well. Yet surely they may need it even more than others, since they are generally ruddy, with congestive—in fact, hyperæmic—complexions and probably brains. It is sad to find that at the very outset Nature has, as it were, refused to give her sanction to the "carotid truss."

With this instrument, and a high-backed chair, like a dentist's,—and how happy would the world be if in that chair it could always be employed!—the author is prepared to give sittings, or sleepings, for regulated periods. "With proper tact and dexterity" it is easy to induce patients to wear the instrument for considerable periods; perhaps, with the absence of these qualities, they might wear it longer,—in fact, till the arrival of that official whom civilized communities intrust with the investigation of cases of mysterious taking off.

"Swallowing and conversation are to be avoided." No matter how angry the patient may be, he cannot even swallow his indignation.

But, to apply a higher degree of pressure for a short time, an instrument has been devised by the same inventor with a detachable key, working an Archimedean screw. Now, it would seem that an almost boundless field of usefulness might lie before this machine: its effects are happy, and a delightful confusion, rapidly followed by sleep, will be witnessed,—if used with "tact and dexterity." Sleep has indeed been aptly termed "the

brother of Death." A few more turns of the screw, and the mother-in-law whose insomnia has been so troublesome will sink to rest. The pressure may not be extreme: "it should not [p. 78] be so great as actually to cause occlusion of the veins and arteries and complete interruption of the circulation:" this is not necessary; *the key may be lost!* "These are the most practical points."

In the use of internal remedies,—for he has not yet advised his truss in that way,—we have an excellent discussion of the use of the bromides and chloral. A good point is made (p. 83) when we read, "The proper time to treat sleeplessness is during the day." He administers his bromides before breakfast, before dinner, and at retiring, in progressively increasing doses. Of chloral he says that its chief virtue is that by it we can give to the already tranquilized brain the primary impulse to drowsiness,—meaning, probably, the final impulse: so that it should be given shortly before retiring. It may not produce a brain-anæmia,—secondarily it does, he believes,—but "it soothes the cerebral plasma itself." When cerebral anæmia is excessive, alcohol is the remedy; and there are times when opium, hyoscyamus baths, and electricity are especially useful.

This book certainly suggests a hope, when all fails and the American has become a sleepless being, that the "carotid truss" will enable us still to sleep, and, like Napoleon the Great, to sleep at will. The citizen of that day will take his sleep as he will his food and drink, and, on emergency, take a deeper slumber, with increased carotid pressure, if time be short. But surely he will need to protect himself by legal enactments, and surround the "carotid truss" with the safeguards of the law, lest, while he slumber, his business rival, his professional opponent, stealthily turn the key one turn too many, and exhibit those higher powers of the instrument which are now used by the inhabitants of Spain on condemned criminals and by the garroter in his midnight avocations. In fact, the mental effort required to submit one's self to the truss would, in most cases, set up such a permanent condition of hyperæmia as to render its constant use necessary.

E. W. W.

A TREATISE OF PRACTICAL INSTRUCTIONS IN THE MEDICAL AND SURGICAL USES OF ELECTRICITY, ETC. By S. E. MORRILL, M.D. Kalamazoo, Michigan, Kalamazoo Publishing Company, 1882.

From aphthæ in the mouth to hemorrhoids elsewhere, from tic to sciatica, electricity in the hands of the author cures everything. Given a careful electrical diagnosis, and even the uneducated can work miracles. Acute diseases yield in from three to five sittings; chronic, in from ten to fifty. Some little assistance may be rendered by homœopathy; ipecac and nux are mentioned; and electricity

the author proves to be a true homœopathic remedy. Triturations are termed dynamizations, and this is derived from a word meaning "force." Electricity is a force; therefore it is a homœopathic medicine. How grand, yet how simple, are the deductions of science! But it is more still: it is a food. This he modestly does not claim as an original discovery, but narrates the case of a child suffering from difficult dentition, and remarks, "when the current was wrapped in a wet cloth, she would chew it with her swollen gums;" it was solid food. By electrical diagnosis diseases are discovered as well as cured,—discovered, he says, much more certainly than by pathology as taught in the schools; and new diseases undreamed of by science are evidently brought to light, though again no claim for their discovery is set up. Dentition, one case of which was "treated all through," "vaginitis," "diphtheritic" croup, and "adhesions of the uterus to the vagina," yielded to the potent force. Girls of ten menstruate regularly, and children of fourteen months suffer from metritis. The author's language is sometimes obscure, and we have tried not to misunderstand it; but when we find him (or her) saying that he in certain cases "uses a catheter to the positive current," can it be possible that he has attempted to draw off electricity as he would urine, or that he has mistaken the cell of a battery for a distended bladder?

Hydrophobia, smallpox, and "toxicum," whatever that may be, present no difficulties to the electric fluid. In the cure of sciatica, "if the patient is a lady the current can with benefit be applied in the vagina;" and one great advantage in being "no gentleman" strikes us forcibly when we read page 176.

Insanity, the author tells us, is supposed by the innocent public to be "caused by mental disease;" but in the many cases of insanity cured by him he "did not in one instance find the cause in the brain." Consumption is the most difficult disease to diagnose, electrically or otherwise. The author has looked in the American Cyclopædia to see what it is, and frankly tells us so. "Oleaginous oils" he condemns, preferring probably the oil of vitriol, which is not "oleaginous." When he wishes to condemn anything extremely modern, as the stethoscope, the endoscope, the sphymograph, he quotes Dr. Benjamin Rush, whom he evidently considers a living authority of great scientific weight; and, in short, it would be hard to find anything more hopelessly trashy than this book, outside the advertisements of Kidney-Wort and St. Jacob's Oil.

E. W. W.

THE PRACTITIONER'S READY REFERENCE-BOOK. By R. J. DUNGLISON, M.D. Philadelphia, H. C. Lea's Sons, 1883.

The appearance of a third edition of this curious book, six years after the publication of the first output, shows that the sagacity of

its author was not at fault in supposing that the half-education so common in this country would cause the demand for just such a treasury of disjointed practicalities as the present volume. This edition has been adapted to the new Pharmacopœia, and has been in various ways improved, so that its popularity will probably not wane. It is a pity, however, that in the matter of antidotes its author does not keep abreast of chemical science: thus, the mixture recommended as an antidote for morphia is an absurdity,—tannic acid added to an infusion of coffee. A man poisoned with carbolic acid might die, simply for the want of the proper antidote, if the practice of the book were followed. In acute poisoning with acetate of lead the patient might die whilst the prescription commended was being sent for, although soap and salt, equally good antidotes, were close at hand. The treatment of copper poisoning is hopelessly imbecile,—iron and flowers of sulphur in a case of sulphate of copper poisoning. The antidote given to creasote is in no sense antidotal to it. "Hoffmann's Anodyne" is said to be the antidote to sulphuretted hydrogen, Seidlitz powders to chloroform, ergot to carbonic oxide, pepsin to alcohol, and syrup of maidenhair fern to ergot! A more puerile, misleading, patient-destroying chapter we have never seen in a very wide acquaintance with medical literature in three languages. We advise every half-educated purchaser to cut this chapter out of his book, through fear that in the emergencies of a poisoning case he may be led by the pressure of his despair and ignorance to consult it.

A MANUAL OF GYNÆCOLOGY. By D. BERRY HART, M.D., F.R.C.P.E., etc., and A. H. BARBOUR, M.A., B.Sc., M.B., etc. New York, William Wood & Co., 1883. In two volumes.

THE DISEASES OF WOMEN: A MANUAL FOR PHYSICIANS AND STUDENTS. By HEINRICH FRITSCH, M.D. New York, William Wood & Co., 1883.

The wayfaring student of gynæcology, though a fool, need not err, one would imagine, unless confused by the multiplicity of guide-posts. The two works noted above view the subject from somewhat different stand-points. The manual of Dr. Hart and Mr. Barbour goes deeply into the anatomy, physiology, and pathology of the pelvis, and concerns itself with operative measures, while the manual of Dr. Fritsch is rather suited for those who have some faith left in the value of remedies and who would consider the knife the final resort. Dr. Hart's pages are overflowing with illustrations,—the two volumes contain eight plates, four hundred and eight wood-cuts, and one lithograph,—while the manual of Dr. Fritsch has one hundred and fifty-nine wood-engravings. As text-books, each serves its own purpose, and is excellent

in its way,—the former being much more thoroughly scientific in its arrangement and minute in its details, while the latter is more readable and contains a wealth of therapeutic suggestion and advice.

E. W. W.

GLEANINGS FROM EXCHANGES.

MICRO-ORGANISMS AND TUBERCULOSIS.—The April issue of *The Practitioner* is entirely devoted to a report to the "Association for the Advancement of Medicine by Research on the Relation of Micro-Organisms to Tuberculosis." The researches of Klebs, Toussaint, Schüller, Koch, and others are discussed historically and critically. The methods of Toussaint and Koch were made the subject of personal investigation, and visits to their laboratories at Toulouse and Berlin, with the results of a large number of physiological experiments, are likewise included in the report, which is further illustrated by some beautiful colored plates representing microscopic sections of diseased structures, and showing the grouping of the tubercle bacilli. Dr. Cheyne says, in conclusion,—

"A consideration of all the facts has led me to the conclusion that tuberculous processes in the lungs are due to the tubercle bacilli, and, so far as I know, to them only. By a tuberculous process I mean one where there is proliferation of epithelium, caseous degeneration of this proliferated epithelium, and inflammation round about, these changes being progressive. It has been supposed that inhalation of dust of various kinds may give rise to phthisis. That the inhalation of dust will lead to inflammatory changes is very likely, that it may lead to proliferation of epithelium which may subsequently degenerate is possible, but that the process will be progressive and extend beyond the seat of irritation is not probable. That the changes set up by the presence of gritty particles may, however, prepare the lung and render it a fit soil for the implantation of bacilli is very probable, and in this way a true tuberculous process may supervene, not due to the original gritty substances, but to the bacilli which came afterwards. I have only had the opportunity of examining three cases of potter's phthisis and one of miner's phthisis. In the former there was, histologically, a true tuberculous structure, and there the tubercle bacilli were found. In the case which was labelled miner's phthisis, but the details of which I did not obtain, there was fibrous formation, the fibrous tissue being very vascular, and there was no appearance, histologically, of tuberculous structure, nor were any bacilli present.

"As to the intestinal ulcerations which often occur in phthisis, and which are supposed to be due to swallowing sputum, I have only examined two cases, and there I found

tubercle bacilli in the wall of the ulcer bearing the same relation to epithelioid cells and caseous matter as elsewhere.

"As to heredity of tubercle, I would call attention to the case of the guinea-pig, which was highly tuberculous and which had an almost fully developed foetus in its uterus (Experiment XVIII., p. 289). The foetus and placenta were healthy and free from tubercles.

"It has often been urged that the milk of tuberculous cows is infective. This may be the case when the mammary glands become tuberculous; and the mode in which the bacilli might get into the milk is well illustrated by the appearances which I found in the kidney of rabbit No. 1. (Experiment XIV., p. 286.) There not only were bacilli present in the tubercular mass, they were also found in large numbers in the epithelium of the kidney-tubules, and in the interior of the tubules, both in the immediate vicinity of the mass and at some distance from it. I have not yet had an opportunity of examining an early tubercle of the kidney, but, from what I have seen, I think it quite likely that the epithelium of the tubules may in some cases be the primary seat of the bacilli in the kidney, just as the alveolar epithelium is in the lung. In that case bacilli would be present in the urine not merely when there were marked tubercular masses in the kidney, but also where the disease was but slightly advanced, here again resembling the case of the lung. From analogy I suppose that the same is the case with the mammary glands, and that bacilli might be present in the milk even though the disease of the gland is not sufficiently far advanced to be noticeable."

CONGENITAL DERMOID CYST OF THE EYE.

—A case illustrating this rare condition was communicated to the Société de Chirurgie by M. Brière, of Havre. An infant, 3 days old, exhibited an outgrowth from the left eye, which was malformed; only the inner third of the cornea and iris remained, the pupil was absent, and there was no external cul-de-sac of the conjunctiva, but it was replaced by a fleshy mass having the appearance of a pterygion. The walls of the cyst were formed by the elements of the skin, containing numerous hair-follicles, with their sebaceous glands and sweat-glands. The tumor was the size of a nut, and was connected with the eye with a pedicle which contained an artery, vein, and nerve-trunk.—*La France Médicale*, No. 49.

CHIAN TURPENTINE IN CASES OF UTERINE CARCINOMA.—Dr. Currie, having found that Chian turpentine gave unexpected relief from pain in a case of duodenal cancer, although its fatal termination was not prevented, decided upon using it, as recommended by Clay, of Manchester, in carcinoma uteri. In a case of this kind (reported in the *Edinburgh Med-*

ical Journal, May), in a lady at the change of life, where the cervix was of almost cartilaginous hardness, he used it, as ordinarily advised, in the form of pill, with great amelioration of the symptoms, although the progress of the case and its fatal issue were unaffected. He suggests an ethereal solution to be used in place of the solid turpentine.

SPURIOUS BICHLORIDE OF METHYLENE.—M. Regnaud (*Le Progrès Médical*, xvii.) found that two French products sold for methylene were nothing but chloroform, and two other samples obtained at quite a high price from England were found to be only a mixture of chloroform and wood-spirit. Possibly some of the deaths from methylene bichloride might be explained in this way.

MISCELLANY.

KEFIR, OR GYPO: A FERMENTED MILK.—E. Kern, of Moscow, contributes the following article to the *Medizinskoje Obosrenije*:

"Kefir," a drink made by the action of a peculiar ferment upon cow's milk, is the chief article of diet among the mountaineers in the neighborhood of Mount Elburus and Casbec. It is a thick, white fluid, with a flavor that recalls that of sour wine. The mountaineers call it "gyppo," while it is known to the Russians and Cabardins there under the names of Kefir, Kifir, and Kiafir. In addition to its nutritive value, it is thought to possess curative powers, especially in anæmia, scrofula, intestinal catarrh, and chronic catarrh of the lungs.

The preparation of Kefir is very simple. The mountaineers pour the milk into a bag made of goatskin, and then throw into it what they call the "seeds" or "kernels." These are about as large as English walnuts, quite consistent, and of a white color, but their origin is unknown. In a few hours after they are put in it begins to ferment. As caseine is frequently left in these bags and decomposes, it is preferable to use clean wooden or glass vessels to obtain a pure flavor.

There are three different strengths, as with koumis,—the weak or one-day kind, the medium or two-day sort, and the stronger, which has fermented for three or more days.

The chief secret in its manufacture consists in the peculiar substance that causes the fermentation. It is with the utmost difficulty that this can be obtained from the mountaineers. If a dry, dark-brown, and shrivelled piece is thrown into the milk, it very soon swells up, becomes smooth and milky white, and acquires the shape of a mulberry or cauliflower, and fermentation goes on rapidly. If a piece is broken off and put in another vessel of milk, it can be seen to grow perceptibly.

Kern deserves credit for having examined this substance. He found it to consist chiefly

of a mass of *zoogloa*, a kind of bacteria, which he named *Dispora Caucasia*. They consist of little rods 3.2 to 8.0 mm. long and 0.8 wide. There are also mixed with these some yeast-cells (*Saccharomyces cerevisiæ*). This ferment will keep for months, when dried, without losing its activity. The author has tested this himself by experiments now being made in St. Petersburg.

Since an excellent substitute for koumis can easily be made anywhere with this ferment, it would seem to have an important future before it.

In conclusion, we would refer, for other details, to a paper by the same author, entitled "A New Milk Ferment from the Caucasus," published in the *Bulletin de la Société des Naturalistes de Moscou*, 1881.—*Druggists' Circular*.

PRIZES FOR SANITARY RESEARCH IN ENGLAND.—The old and distinguished Worshipful Grocers' Company, of London, England, has created a system of endowments for the encouragement of "original research in sanitary science." The research is to be relative to the causation of important diseases and means for their prevention. Of two classes of endowments, one is intended "as a maintenance for work in progress in fields of research to be chosen by the worker," and is provided in the form of three "research scholarships," each of two hundred and fifty pounds annually. The other endowment is appointed as a "discovery prize" of one thousand pounds, to be awarded each four years. The scholarships are limited to British subjects under thirty-five years of age, in the appointment to which preference will be given to candidates whose researches in hand are judged likely to increase the knowledge respecting the causation and prevention of one or more diseases. The "discovery prize" will be awarded to original investigators in any country, who shall in the coming four years make the most important additions to the knowledge of the subject to be announced this month. Treatises published in the English language on the subject during the time will be accepted as competition-treatises, if the author has become a candidate.

AN INTERNAL MITE IN FOWLS.—Prof. Thomas Taylor, microscopist of the Department of Agriculture, had occasion recently to dissect a sick chicken, and he found that all parts of the lung, the bronchiæ, and the linings of the thorax and abdominal cavities were covered more or less thickly with a mite. An examination we were requested to make showed it to be in all respects identical with *Cyloleichus sarcophiles*, Megnin. This parasite is known in Europe to inhabit the air-passages of gallinaceous birds, giving the transparent and membranous linings of these passages the appearance of gold-beater's skin speckled with flour. It is likewise found in

the bronchial tubes and their divisions, and even in the bones with which the air-sacs communicate. Megnin believes that while the mite may be extremely numerous, so as to cause mucous irritation and induce asphyxia and congestion by obstruction of the bronchiæ, and that birds may thus die, yet it is incapable of causing, as Gerlach and Zundel believe, enteritis or inflammation of the peritoneum.

CURIOUS RESULT OF CANNIBALISM IN NEW CALEDONIA. REPORTED BY THE EDITOR, J. M. CREED, L.R.C.P., etc.—In 1848, a man named Sutton, who had been adopted into and was for some time living with the Shuarka tribe of natives in New Caledonia, offended them so seriously, by first leaving it, and afterwards firing on the messengers who were sent to ask him to return, that, watching their opportunity, they attacked his camp, situated on an island a short distance outside the territory of the Shuarka chief, killed him, carried off his body and afterwards cooked and ate it, as was the custom of the New Caledonians. To the knowledge of my informant, Sutton had been for some time suffering from venereal disease, and the natives told him that every man who ate of the flesh died shortly afterwards, apparently poisoned.—*Australasian Medical Gazette*, April, 1883.

PROF. WINIWACTER, of Liège, has been employing parenchymatous injections of hyperosmic acid in cases of sarcoma and lymphoma with astonishing success (*Revue Médicale*). A man applied at his clinic with a sarcoma of the neck as large as a child's head, deemed inoperable. For a fortnight he made daily an injection into its substance of three drops of a one-per-cent. solution of the acid. The tumor rapidly softened, serous pus was discharged from the points where the injections had been made, the infiltration rapidly diminished, and at the end of a month the tumor had completely disappeared. There had been no sign of inflammation, and none of constitutional affection. Since this case he has resorted to it in others like it, as well as in cases of lymphoma and scrofulous adenoma. Only in genuine carcinoma has its result been disappointing.—*Weekly Medical Review*.

MUSTARD-AND-MOLASSES CATAPLASM.—Dr. Tyson, of Philadelphia, says that the addition of molasses to mustard, in making a sinapism, furnishes a mild, persistent counter-irritant which can be worn for hours.

New Remedies says this reads very much like a formula it published some years ago, in which the white of an egg was recommended as a vehicle for mustard plaster,—the advantage alleged for it being that it could be applied for several hours and would not vesicate. Not long afterwards, however, the editor had a letter from some one who, to his sorrow, had acted on his suggestion, and was

then hunting for the rascal who proposed it.—*The Druggist*.

THE following analysis of Indian tea is from samples of 317 packages sold at auction in New York, May 17, 1883: Extract, 37.80 per cent.; total ash, 6.24 per cent.; ash soluble in water, 4.28 per cent.; ash insoluble in water, 1.96 per cent.; ash insoluble in acid, 0.16 per cent.; insoluble leaf, 47.12 per cent.; facing and coloring-matter, foreign leaves, exhausted leaves, none.

Prof. George H. Rohé, Professor of Dermatology and Hygiene in the College of Physicians and Surgeons of Baltimore, has been engaged by the Minnesota College Hospital for a course of twelve lectures upon hygiene.

MEDICAL NIGHT-SERVICE IN PARIS.—During the first three months of this year, 1865 calls were answered by the physicians of the Night Medical Service in Paris, or an average of nearly twenty-one patients each night.

CHANCROID TREATED BY RESORCINE.—According to Leblond et Fissiaux, resorcin, dissolved in twice its weight of water, offers an inodorous and efficient substitute for iodoform in the treatment of venereal ulcers.

THE Massachusetts State Medical Society has again refused to admit women to membership, by a decisive vote, at a meeting held June 13.

THREE factories in the United States consume nearly two million eggs a year in making the peculiar kind of paper used by photographers known as albumen paper.

THE Pennsylvania Anatomy Act has been signed by the Governor, and is now a law.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM MAY 26 TO JUNE 9, 1883.

ALEXANDER, CHARLES T., MAJOR AND SURGEON.—So much of Paragraph 6, S. O. 82, A. G. O., April 15, 1883, amended to direct that he be relieved from duty at the United States Military Academy, West Point, New York, October 1, 1883. Paragraph 7, S. O. 125, A. G. O., June 1, 1883.

HEGER, A., MAJOR AND SURGEON.—Assigned to temporary duty in charge of the office of Medical Director Department of the South during absence on sick-leave of Medical Director. Paragraph 9, S. O. 55, Department of Texas, May 24, 1883.

McKEE, J. C., MAJOR AND SURGEON.—Assigned to duty as Post-Surgeon Presidio of San Francisco, California. Paragraph 2, S. O. 56, Department of California, May 25, 1883.

BROWN, PAUL R., CAPTAIN AND ASSISTANT-SURGEON.—The extension of leave of absence on surgeon's certificate of disability, granted November 23, 1882, further extended six months on account of sickness. Paragraph 6, S. O. 123, A. G. O., May 29, 1883.

DE LOFFRE, A. A., CAPTAIN AND ASSISTANT-SURGEON.—To proceed to Madison Barracks, New York, and report to the post commander for duty. Paragraph 2, S. O. 98, Department of the East, June 5, 1883.